

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended September 30, 2022

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 001-32833

TransDigm Group Incorporated

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

41-2101738

(I.R.S. Employer Identification No.)

1301 East 9th Street, Suite 3000, Cleveland, Ohio

44114

(Address of principal executive offices)

(Zip Code)

(216) 706-2960

(Registrants' telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Name of exchange on which registered
Common Stock, \$0.01 par value	TDG	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer Accelerated Filer

Non-Accelerated Filer Smaller Reporting Company

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of April 1, 2022, based upon the last sale price of such voting and non-voting common stock on that date, was \$36,817,194,154.

The number of shares outstanding of TransDigm Group Incorporated's common stock, par value \$.01 per share, was 54,374,596 as of October 31, 2022.

Documents incorporated by reference: Certain sections of the registrant's definitive Proxy Statement to be filed in connection with its 2023 Annual Meeting of Shareholders expected to be held on March 9, 2023 are incorporated by reference into Part III of this Annual Report on Form 10-K.

TABLE OF CONTENTS

	<u>Page</u>	
PART I		
ITEM 1	BUSINESS	1
ITEM 1A	RISK FACTORS	9
ITEM 1B	UNRESOLVED STAFF COMMENTS	18
ITEM 2	PROPERTIES	19
ITEM 3	LEGAL PROCEEDINGS	21
PART II		
ITEM 5	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	21
ITEM 6	[RESERVED]	22
ITEM 7	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	23
ITEM 7A	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	43
ITEM 8	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	43
ITEM 9	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	44
ITEM 9A	CONTROLS AND PROCEDURES	45
ITEM 9B	OTHER INFORMATION	47
PART III		
ITEM 10	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	47
ITEM 11	EXECUTIVE COMPENSATION	48
ITEM 12	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	48
ITEM 13	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	48
ITEM 14	PRINCIPAL ACCOUNTANT FEES AND SERVICES	48
PART IV		
ITEM 15	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	49
	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	78

Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains both historical and “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and 27A of the Securities Act of 1933, as amended. All statements other than statements of historical fact included that address activities, events or developments that we expect, believe or anticipate will or may occur in the future are forward-looking statements, including, in particular, the statements about our plans, objectives, strategies and prospects regarding, among other things, our financial condition, results of operations and business. We have identified some of these forward-looking statements with words like “believe,” “may,” “will,” “should,” “expect,” “intend,” “plan,” “predict,” “anticipate,” “estimate” or “continue” and other words and terms of similar meaning. These forward-looking statements may be contained throughout this Annual Report on Form 10-K. These forward-looking statements are based on current expectations about future events affecting us and are subject to uncertainties and factors relating to, among other things, our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Many factors mentioned in our discussion in this Annual Report on Form 10-K, including the risks outlined under “Risk Factors,” will be important in determining future results. Although we believe that the expectations reflected in these forward-looking statements are reasonable, we do not know whether our expectations will prove correct. They can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties, including those described under “Risk Factors” in this Annual Report on Form 10-K. Since our actual results, performance or achievements could differ materially from those expressed in, or implied by, these forward-looking statements, we cannot give any assurance that any of the events anticipated by these forward-looking statements will occur or, if any of them does occur, what impact they will have on our business, results of operations and financial condition. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date they are made. We do not undertake any obligation to update these forward-looking statements or the risk factors contained in this Annual Report on Form 10-K to reflect new information, future events or otherwise, except as may be required under federal securities laws.

Important factors that could cause actual results to differ materially from the forward-looking statements made in this Annual Report on Form 10-K include but are not limited to: the impact that the COVID-19 pandemic has on our business, results of operations, financial condition and liquidity; the sensitivity of our business to the number of flight hours that our customers’ planes spend aloft and our customers’ profitability, both of which are affected by general economic conditions; current and future geopolitical or other worldwide events; cybersecurity threats and natural disasters; our reliance on certain customers; the United States (“U.S.”) defense budget and risks associated with being a government supplier including government audits and investigations; failure to maintain government or industry approvals; failure to complete or successfully integrate acquisitions; our indebtedness; potential environmental liabilities; liabilities arising in connection with litigation; increases in raw material costs, taxes and labor costs that cannot be recovered in product pricing; risks and costs associated with our international sales and operations; and other factors.

In this report, the term “TD Group” refers to TransDigm Group Incorporated, which holds all of the outstanding capital stock of TransDigm Inc. The terms “Company,” “TransDigm,” “we,” “us,” “our” and similar terms, unless the context otherwise requires, refer to TD Group, together with TransDigm Inc. and its wholly-owned and majority-owned subsidiaries for which it has a controlling interest. References to “fiscal year” mean the year ending or ended September 30. For example, “fiscal year 2022” or “fiscal 2022” means the period from October 1, 2021 to September 30, 2022.

PART I

ITEM 1. BUSINESS

The Company

TD Group, through its wholly-owned subsidiary, TransDigm Inc., is a leading global designer, producer and supplier of highly engineered aircraft components for use on nearly all commercial and military aircraft in service today. Our business is well diversified due to the broad range of products we offer to our customers. We estimate that approximately 90% of our net sales for fiscal year 2022 were generated by proprietary products.

Most of our products generate significant aftermarket revenue. Once our parts are designed into and sold on a new aircraft, we generate net sales from aftermarket consumption over the life of that aircraft, which is generally estimated to be approximately 25 to 30 years. A typical platform can be produced for 20 to 30 years, giving us an estimated product life cycle in excess of 50 years. We estimate that approximately 55% of our net sales in fiscal year 2022 were generated from the aftermarket, the vast majority of which come from the commercial and military aftermarkets. Historically, these aftermarket revenues have produced a higher gross profit and have been more stable than net sales to original equipment manufacturers (“OEMs”).

Pre-pandemic, and as our business continues to recover from the COVID-19 pandemic, we believe we have achieved steady, long-term growth in sales and improvements in operating performance we believe that due to our competitive strengths and through execution of our value-driven operating strategy. More specifically, focusing our businesses on our value-driven operating strategy of obtaining profitable new business, carefully controlling the cost structure and pricing our highly engineered value-added products to fairly reflect the value we provide and the resources required to do so has historically resulted in improvements in gross profit and income from operations over the long-term.

Products

We primarily design, produce and supply highly engineered proprietary aerospace components with significant aftermarket content. We seek to develop highly customized products to solve specific needs for aircraft operators and manufacturers. We attempt to differentiate ourselves based on engineering, service and manufacturing capabilities. We typically choose not to compete for non-proprietary “build to print” business because it frequently offers lower margins than proprietary products. We believe that our products have strong brand names within the industry and that we have a reputation for high quality, reliability and strong customer support.

Our business is well diversified due to the broad range of products that we offer to our customers. Our major product offerings, substantially all of which are ultimately provided to end-users in the aerospace industry, include mechanical/electro-mechanical actuators and controls, ignition systems and engine technology, specialized pumps and valves, power conditioning devices, specialized AC/DC electric motors and generators, batteries and chargers, engineered latching and locking devices, engineered rods, engineered connectors and elastomer sealing solutions, databus and power controls, cockpit security components and systems, specialized and advanced cockpit displays, engineered audio, radio and antenna systems, specialized lavatory components, seat belts and safety restraints, engineered and customized interior surfaces and related components, advanced sensor products, switches and relay panels, thermal protection and insulation, lighting and control technology, parachutes, high performance hoists, winches and lifting devices, and cargo loading, handling and delivery systems. Each of our product offerings is composed of many individual products that are typically customized to meet the needs of a particular aircraft platform or customer.

Segments

The Company’s businesses are organized and managed in three reporting segments: Power & Control, Airframe and Non-aviation.

The Power & Control segment includes operations that primarily develop, produce and market systems and components that predominately provide power to or control power of the aircraft utilizing electronic, fluid, power and mechanical motion control technologies. Major product offerings include mechanical/electro-mechanical actuators and controls, ignition systems and engine technology, specialized pumps and valves, power conditioning devices, specialized AC/DC electric motors and generators, batteries and chargers, databus and power controls, advanced sensor products, switches and relay panels, high performance hoists, winches and lifting devices, and cargo loading, handling and delivery systems. Primary customers of this segment are engine and power system and subsystem suppliers, airlines, third party maintenance suppliers, military buying agencies and repair depots. Products are sold in the original equipment and aftermarket market channels.

The Airframe segment includes operations that primarily develop, produce and market systems and components that are used in non-power airframe applications utilizing airframe and cabin structure technologies. Major product offerings include engineered latching and locking devices, engineered rods, engineered connectors and elastomer sealing solutions, cockpit security components and systems, specialized and advanced cockpit displays, engineered audio, radio and antenna systems, specialized lavatory components, seat belts and safety restraints, engineered and customized interior surfaces and related components, thermal protection and insulation, lighting and control technology and parachutes. Primary customers of this segment are airframe manufacturers and cabin system suppliers and subsystem suppliers, airlines, third party maintenance suppliers, military buying agencies and repair depots. Products are sold in the original equipment and aftermarket market channels.

The Non-aviation segment includes operations that primarily develop, produce and market products for non-aviation markets. Major product offerings include seat belts and safety restraints for ground transportation applications, mechanical/electro-mechanical actuators and controls for space applications, hydraulic/electromechanical actuators and fuel valves for land-based gas turbines, and refueling systems for heavy equipment used in mining, construction and other industries and turbine controls for the energy and oil and gas markets. Primary customers of this segment are off-road vehicle suppliers and subsystem suppliers, child restraint system suppliers, satellite and space system suppliers, manufacturers of heavy equipment used in mining, construction and other industries and turbine original equipment manufacturers, gas pipeline builders and electric utilities.

The primary measurement used by management to review and assess the operating performance of each segment is EBITDA As Defined. The Company defines EBITDA As Defined as earnings before interest, taxes, depreciation and amortization plus certain non-operating items recorded as corporate expenses including non-cash compensation charges incurred in connection with the Company's stock incentive or deferred compensation plans, restructuring costs related to the Company's cost reduction measures in response to the COVID-19 pandemic, foreign currency gains and losses, acquisition-integration costs, acquisition and divestiture transaction-related expenses, and refinancing costs. COVID-19 restructuring costs represented actions primarily taken by the Company in fiscal 2021 and 2020 to reduce its workforce to align with customer demand, as well as incremental costs related to the pandemic that are not expected to recur once the pandemic has subsided and are clearly separable from normal operations (e.g., additional cleaning and disinfecting of facilities by contractors above and beyond normal requirements, personal protective equipment). Acquisition and divestiture-related costs represent accounting adjustments to inventory associated with acquisitions of businesses and product lines that were charged to cost of sales when the inventory was sold; costs incurred to integrate acquired businesses and product lines into the Company's operations, facility relocation costs and other acquisition-related costs; transaction-related costs for both acquisitions and divestitures comprising deal fees; legal, financial and tax diligence expenses and valuation costs that are required to be expensed as incurred and other acquisition accounting adjustments.

For financial information about our segments, refer to Note 17, "Segments," in the notes to the consolidated financial statements included herein.

Sales and Marketing

Consistent with our overall strategy, our sales and marketing organization is structured to continually develop technical solutions that meet customer needs. In particular, we attempt to focus on products and programs that will lead to high-margin, repeatable sales in the aftermarket.

We have structured our sales efforts along our major product offerings, assigning a business unit manager to certain products. Each business unit manager is expected to grow the sales and profitability of the products for which he or she is responsible and to achieve the targeted annual level of bookings, net sales, new business and profitability for such products. The business unit managers are assisted by account managers and sales engineers who are responsible for covering major OEM and aftermarket accounts. Account managers and sales engineers are expected to be familiar with the personnel, organization and needs of specific customers to achieve total bookings and new business goals for each account and, together with the business unit managers, to determine when additional resources are required at customer locations. Most of our sales personnel are evaluated, in part, on their bookings and their ability to identify and obtain new business opportunities.

Though typically performed by employees, the account manager function may be performed by independent representatives depending on the specific customer, product and geographic location. We also use a number of distributors to provide logistical support as well as serve as a primary customer contact with certain smaller accounts. Boeing Distribution Services, Inc., Satair A/S (a subsidiary of Airbus S.A.S.) and AAR Corp., among others, are our major distributors.

Manufacturing and Engineering

We maintain approximately 100 manufacturing facilities. Most of our manufacturing facilities are comprised of manufacturing, distribution and engineering functions, and most facilities have certain administrative functions, including management, sales and finance. We continually strive to improve productivity and reduce costs, including rationalization of operations, developing improved control systems that allow for accurate accounting and reporting, investing in equipment, tooling, information systems (including cybersecurity) and implementing broad-based employee training programs. Management believes that our manufacturing systems and equipment contribute to our ability to compete by permitting us to meet the rigorous tolerances and cost sensitive price structure of aircraft component customers.

We attempt to differentiate ourselves from our competitors by producing uniquely engineered products with high quality and timely delivery. Our engineering costs are recorded in cost of sales and in selling and administrative expenses within our consolidated statements of income. Research and development costs are recorded in selling and administrative expenses within our consolidated statements of income. The aggregate of engineering expense and research and development expense represents approximately 10% of our operating units' aggregate costs, or approximately 5% of our consolidated net sales for fiscal year 2022. Our proprietary products, and particularly our new product initiatives, are designed by our engineers and are intended to serve the needs of the aircraft component industry. These proprietary designs must withstand the extraordinary conditions and stresses that will be endured by products during use and meet the rigorous demands of our customers' tolerance and quality requirements. Refer to Note 3, "Summary of Significant Accounting Policies," in the notes to the consolidated financial statements included herein with respect to the total costs of research and development.

We use sophisticated equipment and procedures to comply with quality requirements, specifications and aviation authority and OEM requirements. We perform a variety of testing procedures as required by our customers, such as testing under different temperature, humidity and altitude levels, flammability testing, shock and vibration testing and X-ray fluorescent measurement. These procedures, together with other customer approved techniques for document, process and quality control, are used throughout our manufacturing facilities.

Customers

We predominantly serve customers in the commercial, regional, business jet and general aviation aftermarket, which accounted for approximately 29% of our net sales for fiscal year 2022; the commercial aerospace OEM market, comprising large commercial transport manufacturers and regional and business jet manufacturers, which accounted for approximately 21% of our net sales for fiscal year 2022; and the defense market (which includes defense OEMs and aftermarket sales to the U.S. and friendly foreign governments), which accounted for approximately 43% of our net sales for fiscal year 2022. Non-aerospace net sales comprised approximately 7% of our net sales for fiscal year 2022.

As a result of the COVID-19 pandemic and its adverse impact on air travel worldwide, the commercial aerospace industry has been significantly disrupted. To a lesser extent, the defense aerospace market has been adversely impacted by the COVID-19 pandemic, with this impact arising primarily from supply chain shortages. This has led to the defense market comprising a greater percentage of our net sales in fiscal years 2022, 2021 and 2020 compared to pre-pandemic historical levels. In fiscal years 2015 through 2019, defense market net sales ranged from 29% to 37% of total net sales. As the commercial aerospace industry continues to recover, we expect defense market net sales to account for a percentage of total net sales that is relatively in line with our historical levels prior to the COVID-19 pandemic. We began to see this expected trend in fiscal 2022, as defense sales represented 43% of net sales compared to 50% of net sales in fiscal 2021.

Our customers include: (1) distributors of aerospace components; (2) worldwide commercial airlines, including national and regional airlines; (3) large commercial transport and regional and business aircraft OEMs; (4) various armed forces of the United States and friendly foreign governments; (5) defense OEMs; (6) system suppliers; and (7) various other industrial customers. Our top ten customers for fiscal year 2022 accounted for approximately 41% of our net sales. Products supplied to many of our customers are used on multiple platforms. None of our customers individually accounted for greater than 10% of our net sales for fiscal year 2022.

The markets in which we sell our products are, to varying degrees, cyclical and have experienced upswings and downturns. The demand for our commercial aftermarket parts and services depends on, among other things, the breadth of our installed OEM base, revenue passenger miles (“RPMs”), the size and age of the worldwide aircraft fleet, the percentage of the worldwide fleet that is in warranty, and airline profitability. The demand for defense products is specifically dependent on government budget trends, military campaigns and political pressures.

Competition

The niche markets within the aerospace industry that we serve are relatively fragmented and we face several competitors for many of the products and services we provide. Due to the global nature of the commercial aircraft industry, competition in these categories comes from both U.S. and foreign companies. Competitors in our product offerings range in size from divisions of large public corporations to small privately-held entities with only one or two components in their entire product portfolios.

We compete on the basis of engineering, manufacturing and marketing high quality products, which we believe meet or exceed the performance and maintenance requirements of our customers, consistent and timely delivery, and superior customer service and support. The industry’s stringent regulatory, certification and technical requirements and the investments necessary in the development and certification of products may create disincentives for potential new competitors for certain products. If customers receive products that meet or exceed expectations and performance standards, we believe that they will have a reduced incentive to certify another supplier because of the cost and time of the technical design and testing certification process. In addition, we believe that the availability, dependability and safety of our products are reasons for our customers to continue long-term supplier relationships.

Government Contracts

Companies engaged in supplying defense-related equipment and services to United States Government (“U.S. Government”) agencies are subject to business risks specific to the defense industry. These risks include the ability of the U.S. Government to unilaterally: (1) suspend us from receiving new contracts; (2) terminate existing contracts; (3) reduce the value of existing contracts; (4) audit our contract-related costs and fees, including allocated indirect costs; (5) control and potentially prohibit the export of our products; and (6) seek repayment of contract related payments under certain circumstances. Violations of government procurement laws could result in civil or criminal penalties.

Governmental Regulation

The commercial aircraft component industry is highly regulated by the Federal Aviation Administration (“FAA”) in the United States and by the European Union Aviation Safety Agency in Europe and other agencies throughout the world, while the military aircraft component industry is governed by military quality specifications. We, and the components we manufacture, are required to be certified by one or more of these entities or agencies, and, in many cases, by individual OEMs, in order to engineer and service parts and components used in specific aircraft models.

We must also satisfy the requirements of our customers, including OEMs and airlines that are subject to FAA regulations, and provide these customers with products and services that comply with the government regulations applicable to commercial flight operations. In addition, the FAA and other aviation authorities require that various maintenance routines be performed on aircraft components. We believe that we currently satisfy or exceed these maintenance standards in our repair and overhaul services. We also maintain several FAA-approved repair stations.

In addition, our businesses are subject to many other laws and requirements typically applicable to manufacturers and exporters. Without limiting the foregoing, sales of many of our products that will be used on aircraft owned by foreign entities are subject to compliance with export control laws and the manufacture of our products and the operations of our businesses, including the disposal of hazardous wastes, are subject to compliance with applicable environmental laws.

Market Channels

The commercial aerospace industry, including the aftermarket and OEM markets, is impacted by the health of the global economy and geopolitical events around the world. The commercial aerospace industry, in particular, has been significantly disrupted, both domestically and internationally, by the COVID-19 pandemic. The commercial aerospace industry experienced a steep decline in RPMs beginning in the second half of our fiscal 2020 due to the COVID-19 pandemic's impact on worldwide air travel demand. RPMs have significantly recovered from pandemic lows, but remained depressed in fiscal 2022 when compared to pre-pandemic levels. Also, as a result of the pandemic and decreased demand in commercial air travel, the commercial OEM sector experienced reductions in commercial OEM production rates, including reductions at the two largest commercial OEMs, The Boeing Company ("Boeing") and Airbus S.A.S. ("Airbus"). Throughout fiscal 2022, the commercial aerospace industry continued to recover towards pre-pandemic levels. In fiscal 2022, commercial air travel demand trended upward, and both Boeing and Airbus increased OEM production rates. Boeing and Airbus are also expecting further improvement in OEM production rates during calendar 2023. These trends are favorable; however, uncertainty remains in the shape and pace of the commercial aerospace industry's path to a full recovery.

The defense aerospace market is dependent on government budget constraints, the timing of orders, political pressures and the extent of global conflicts. It is not necessarily affected by the same general economic conditions that affect the commercial aerospace industry. The defense aerospace market has been impacted by the COVID-19 pandemic to a lesser extent than the commercial aerospace market with this impact arising primarily from supply chain shortages. Additionally, within the defense market, the pace of U.S. government defense spending outlays and government funding reprioritization provides for uncertainty.

Historically, our presence in both the commercial aerospace and military sectors of the aerospace industry has served to mitigate the impact on our business of any specific industry risk. We service a diversified customer base in the commercial and military aerospace industry, and we provide components to a diverse installed base of aircraft, which mitigates our exposure to any individual airframe platform. At times, declines in net sales in one channel have been offset by increased net sales in another channel. However, due to differences between the profitability of our products sold to OEM and aftermarket customers, variation in product mix can cause variation in gross profit.

Outside of the market disruption caused by COVID-19, there are many short-term factors (including customer inventory level adjustments, supply chain issues, unannounced changes in order patterns, strikes, facility shutdowns caused by fires, hurricanes, health crises or other incidents and mergers and acquisitions) that can cause short-term disruptions in our quarterly shipment patterns as compared to previous quarters and the same periods in prior years. As such, it can be difficult to determine longer-term trends in our business based on quarterly comparisons. To normalize for short-term fluctuations, we tend to look at our performance over several quarters or years of activity rather than discrete short-term periods. Additionally, there are fluctuations in OEM and aftermarket product mix from quarter-to-quarter that may cause positive or negative variations in gross profit since commercial aftermarket net sales have historically produced higher gross profit margins than net sales to commercial OEMs. Again, in many instances these are timing events between quarters and must be balanced with macro aerospace industry indicators.

Commercial Aftermarket

The key market factors in the commercial aftermarket include worldwide RPMs and the size and activity level of the worldwide fleet of aircraft and the percentage of the fleet that is in warranty. As a result of the COVID-19 pandemic and the stringent measures implemented to help control the pandemic, demand for air travel declined at a rapid pace and led to a significant reduction in flights. Although worldwide air traffic remains significantly lower than pre-pandemic levels, RPMs continued to steadily improve in fiscal 2022 and many aircraft parked by airlines have been returned to service. Commercial air travel in domestic markets continued to lead the air traffic recovery in fiscal 2022 with certain domestic markets nearing pre-pandemic air traffic levels. The pace of the international air traffic recovery has been slower than the domestic recovery, but international RPMs made positive strides in fiscal 2022 and are catching up to the domestic air traffic recovery. Current industry consensus indicates that worldwide RPMs will continue to recover in 2023. Overall, the timing and pace of the commercial aftermarket recovery remains uncertain and continues to evolve.

Commercial OEM Market

The commercial OEM market remained depressed in fiscal 2022 primarily due to the continued impact of the COVID-19 pandemic, the supply chain disruptions throughout the commercial OEM supply chain and Boeing's ongoing regulatory and quality challenges with the 737 MAX aircraft (particularly in China) and the 787 aircraft. Our commercial transport OEM shipments and revenues generally run ahead of Boeing and Airbus aircraft delivery schedules. As a result, and consistent with prior years, our fiscal 2023 shipments will be a function of, among other things, the estimated 2023 and 2024 commercial aircraft production rates. We have been experiencing depressed net sales across the commercial OEM sector primarily due to the lower than pre-pandemic production rates at Boeing and Airbus, although production rates slowly began to improve in fiscal 2022. We expect demand for our commercial OEM products to continue to be reduced in the short-term. The commercial OEM market is now showing signs of recovery with airlines returning to the commercial OEMs to place orders; however, the commercial OEM supply chain challenges impacting Boeing and Airbus are slowing the pace of new aircraft manufacturing. Both Boeing and Airbus have disclosed further planned OEM production rate increases for calendar 2023. The pace of the recovery of the commercial OEM market remains uncertain and continues to evolve.

Our businesses continually seek to provide solutions for our customers and others in the commercial aerospace industry. Our current initiatives include creating new products that are more environmentally friendly, such as radiation-free exciters, and creating new products that will help further improve commercial airlines' efforts to keep passengers healthy and safe, such as touch-free aircraft lavatory suite products.

Defense

Our military business fluctuates from year-to-year, and is dependent, to a degree, on government budget constraints, the timing of orders, macro and micro dynamics with respect to the U.S. Department of Defense ("DOD") procurement policy and the extent of global conflicts. Also, delays in government spending outlays and government funding reprioritization, such as shifting funds to efforts to combat the impact of the pandemic or efforts to assist Ukraine in the Russia and Ukraine conflict, provides for further unpredictability in the military spending outlook. For a variety of reasons, the military spending outlook is very uncertain, though recent DOD budgets have trended upwards.

Raw Materials

We require the use of various raw materials in our manufacturing processes. We purchase a variety of manufactured component parts from various suppliers. We also purchase replacement parts, which are utilized in our various repair and overhaul operations. At times, we concentrate our orders among a few suppliers in order to strengthen our supplier relationships. Most of our raw materials and component parts are generally available from multiple suppliers at competitive prices.

The COVID-19 pandemic has continued to disrupt the global supply chain to a certain extent and availability of raw materials, particularly electronic parts, which primarily are utilized to produce products in the defense market channel. Because we strive to limit the volume of raw materials and component parts on hand, our business could be adversely affected if we are unable to obtain these raw materials and components from our suppliers in the quantities we require or on favorable terms. Although we believe in most cases that we could identify alternative suppliers, or alternative raw materials or component parts, the lengthy and expensive FAA and OEM certification processes associated with aerospace products could prevent efficient replacement of a supplier, raw material or component part.

Intellectual Property

We have various trade secrets, proprietary information, trademarks, trade names, patents, copyrights and other intellectual property rights, which we believe, in the aggregate but not individually, are important to our business. The Company's products are manufactured, marketed and sold using a portfolio of patents, trademarks, licenses, and other forms of intellectual property, some of which expire in the future. The Company develops and acquires new intellectual property on an ongoing basis. Based on the broad scope of the Company's product lines, management believes that the loss or expiration of any single intellectual property right would not have a material effect on our consolidated financial statements.

Environmental Matters

Our operations and facilities are subject to a number of federal, state, local and foreign environmental laws and regulations that govern, among other things, discharges of pollutants into the air and water, the generation, handling, storage and disposal of hazardous materials and wastes, the remediation of contamination and the health and safety of our employees. Environmental laws and regulations may require that the Company investigate and remediate the effects of the release or disposal of materials at sites associated with past and present operations. Certain facilities and third-party sites utilized by the Company have been identified as potentially responsible parties under the federal superfund laws and comparable state laws. The Company is currently involved in the investigation and remediation of a number of sites under applicable laws.

For information regarding environmental accruals, refer to Note 15, “Commitments and Contingencies,” in the notes to the consolidated financial statements included herein. Compliance with federal, state, local and foreign environmental laws during fiscal 2022 had no material impact on our capital expenditures or results of operations. Based upon consideration of currently available information, we believe liabilities for environmental matters will not have a material adverse impact on our consolidated financial statements, but we cannot assure that material environmental liabilities may not arise in the future. For further information on environmental-related risks, including climate change, refer to Item 1A. “Risk Factors.”

Human Capital Resources

As of September 30, 2022, we had approximately 14,400 full-time, part-time and temporary employees. Approximately 17% of our full-time and part-time employees are represented by labor unions. Collective bargaining agreements between us and these labor unions expire at various dates up to September 2026.

Talent Development

We consider our employees to be our greatest asset. Succession planning and the development, attraction and retention of employees is critical for TransDigm and its operating units to sustain our three core value drivers (obtaining profitable new business, continually improving our cost structure and providing highly engineered value-added products to customers). To support the advancement of our employees, we offer training and development programs encouraging advancement from within and continue to fill our team with strong and experienced management talent. We leverage both formal and informal programs to identify, foster, and retain top talent at both the corporate and operating unit level.

We have established TransDigm University, in partnership with the University of Southern California Marshall School of Business, a formal mentoring and education program with a curated curriculum and established leadership serving as mentors. Participants in the program learn and develop more advanced skills leading to higher contribution and satisfaction within their roles, while mentors enhance their leadership capabilities by helping others progress. This program helps identify top performers, improving employee performance and retention, increasing our organizational learning and supporting the promotion of our current employees.

The Company’s Management Development Program (“MDP”) identifies new talent and prepares them for success within our organization. The Company actively recruits for MDP candidates at colleges and universities across the U.S. to ensure we are reaching a large and diverse pool of candidates. The program hires recent Master of Business Administration graduates who work for three eight-month periods at a selection of operating units. Program participants gain experience in developing, manufacturing, and selling aerospace components with the intent of becoming fully immersed in the operations of our business. Once the program is complete, MDP participants are better equipped with the knowledge and experience needed to excel as a manager at TransDigm. Our goal for successful MDP participants is to hire them on a full-time basis at an operating unit upon completion of the program.

TransDigm’s executive team also mentors rising talent on a more informal basis. This informal mentorship achieves a number of goals, including accelerating the development of top performers, increasing organizational learning, and improving employee performance and retention. The executive team also commits substantial time to evaluating the bench strength of our leadership and working with our leadership to improve their performance.

TransDigm University, MDP, various internship programs and informal mentoring demonstrates the Company’s ongoing commitment and initiatives towards accelerating the development of our future leaders.

Benefits

We are proud to offer attractive benefits packages that attract, retain, motivate and reward our talent, and we are committed to providing our employees and their families with programs that support their health and overall well-being. To assist employees with financial empowerment, we offer retirement savings plans. We also offer employees the ability to save money on a tax-free basis through flexible spending accounts and health savings accounts. TransDigm offers competitive compensation programs to our employees that includes base pay, bonus programs and equity programs. TransDigm employees also receive paid time off and holidays.

We understand the value in furthering the knowledge and education of our current employee base. In addition to formal and informal employee development programs within TransDigm and our operating units, employees can expand their careers by accessing tuition reimbursement programs. Some operating units also partner with local colleges to provide training courses to TransDigm employees. Access to programs such as these enhance our employees’ value to the Company, our customers and our communities.

TransDigm’s equity compensation plans are designed to assist in attracting, retaining, motivating and rewarding key employees and directors, and promoting the creation of long-term value for our stockholders by closely aligning the interests of these individuals with those of our stockholders. TransDigm’s equity compensation plans provide for the granting of performance-based stock options. Equity compensation, and specifically stock options, is a significant component of TransDigm’s equity-based compensation strategy and value-based culture. Our approach to equity has a track record of success and we believe that the continued use of performance-based stock options will help retain the Company’s key employees and recruit the talented minds of the future.

Diversity

At TransDigm, we value new ideas, different experiences and fresh perspectives, and we firmly believe this is enhanced by a more diverse workforce throughout all levels of our organization. Diversity and inclusion make us stronger as a company – it is critical to innovation, provides a competitive advantage, yields better outcomes, and in turn, enables us to better deliver for all of our stakeholders.

We know that the tone is set from the top, and our commitment to diversity and inclusion must be reflected within our leadership team as well as our Board of Directors. TransDigm implemented unconscious bias training for our Board of Directors and management in fiscal 2022. Also, for the fiscal 2022 MDP class and moving forward, we expanded the MDP recruitment program to include nine additional colleges and universities, and we also focused on creating a more diverse class. Approximately 35% of total past and present MDP participants are gender and racially diverse, and we are working to further improve that percentage in the future. We are committed to diversity at all levels of management and leadership, and our leadership team and Board of Directors are committed to improving diversity throughout the Company and fostering a more inclusive and open environment. Diversity and inclusion make us stronger as a business so we can effectively serve all our stakeholders. Our workforce includes talented people from many backgrounds.

Discrimination is not tolerated at TransDigm. We are committed to high ethical standards and equal employment opportunities in all personnel actions without regard to race, color, religion, gender, national origin, citizenship status, age, marital status, gender identity or expression, sexual orientation, physical or mental disability, or veteran status.

As a company whose products and values are closely tied to supporting the U.S. military and its allies, we are dedicated to offering employment opportunities to U.S. military veterans. Supporting our veterans as they enter the civilian workforce is incredibly important to us given their valuable wealth of knowledge and skills. Many of our U.S.-based operating units have specific programs or initiatives that provide career opportunities to veterans as they transition into the civilian workforce.

Health and Safety

Our commitment to manufacturing the safest, highest quality products is matched by our commitment to keeping our employees healthy and safe as they work to produce these products. We are dedicated to building, designing, maintaining, and operating our facilities to effectively manage process safety and other hazards, and to minimize risks. We also seek to empower and support our employees to prevent accidents and promote a safe environment. We expect personnel to report and communicate risks, potential hazards, incidents and near hits so that they can be investigated, and appropriate action can be taken to prevent future issues. To elevate the importance of this, we began to require our operating units to individually report on Environmental Health and Safety matters monthly to the executive team.

Throughout the COVID-19 pandemic, we have been following guidance from the World Health Organization and the U.S. Center for Disease Control to protect employees and prevent the spread of the virus within all of our facilities globally.

Seasonality

We do not believe our net sales are subject to significant seasonal variation; however, our net sales have generally been lower in the first quarter of our fiscal year compared to the subsequent quarters due to fewer working days resulting from the observance of various holidays.

Available Information

TD Group's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments, will be made available free of charge on the Company's website, www.transdigm.com, as soon as reasonably practicable, following the filing of the reports with the Securities and Exchange Commission ("SEC"). In addition, the Company's website allows investors and other interested persons to sign up to automatically receive e-mail alerts when news releases and financial information is posted on the website. The SEC also maintains a website, www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The information on or obtainable through our website is not incorporated into this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

Set forth below are material risks and uncertainties that could negatively affect our business and financial condition and could cause our actual results to differ materially from those expressed in forward-looking statements contained in this report. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and financial condition.

Risks Related to our Strategy

We face risks related to the current COVID-19 pandemic and other health pandemics, epidemics and outbreaks.

The COVID-19 pandemic is continuing to cause an adverse impact on our employees, operations, supply chain and distribution system and the long-term impact to our business remains unknown. This is due to the numerous uncertainties that have risen from the pandemic, including the likelihood of resurgences and the emergence and spread of variants, actions that may be taken by governmental authorities in response to the disease, the continued efficacy and public acceptance of vaccines, and unintended consequences of the foregoing.

The commercial aerospace industry, in particular, has been significantly disrupted, both domestically and internationally, by the pandemic. The pandemic has resulted in governments around the world implementing stringent measures to help control the spread of the virus, including quarantines, “shelter in place” and “stay at home” orders, travel restrictions, business curtailments and other measures. As a result, demand for travel declined at a rapid pace beginning in the second half of fiscal 2020 and has remained depressed compared to pre-pandemic levels.

The COVID-19 pandemic has also disrupted the global supply chain and availability of raw materials, particularly electronic parts. The disruption in the supply chain has resulted in increased freight costs, raw material costs and labor costs from the ongoing inflationary environment. Our business has been adversely affected and could continue to be adversely affected by disruptions in our ability to timely obtain raw materials and components from our suppliers in the quantities we require or on favorable terms. Although we believe in most cases that we could identify alternative suppliers, or alternative raw materials or component parts, the lengthy and expensive aviation authority and OEM certification processes associated with aerospace products could prevent efficient replacement of a supplier, raw material or component part. Because the duration of the pandemic is unclear, it is difficult to forecast a precise impact on the Company’s future results. We will continue to evaluate the nature and extent to which COVID-19 will impact our business, supply chain, consolidated results of operations, financial condition, and liquidity.

Our business focuses almost exclusively on the aerospace and defense industry.

During a prolonged period of significant market disruption in the aerospace and defense industry, such as the adverse impact that the COVID-19 pandemic has had and is expected to continue to have on the commercial aerospace market, and other macroeconomic factors such as when recessions occur, our business may be disproportionately impacted compared to peer companies that are more diversified in the industries they serve. A more diversified company with significant sales and earnings derived from outside the aerospace and defense sector may be able to recover more quickly from significant market disruptions such as the COVID-19 pandemic.

We rely heavily on certain customers for much of our sales.

In fiscal year 2022, no customer individually accounted for 10% or more of the Company’s net sales; however, our top ten customers for fiscal year 2022 accounted for approximately 41% of our net sales. A material reduction in purchasing by one of our larger customers for any reason, including but not limited to the COVID-19 pandemic, general economic or aerospace downturn, decreased production, strike or resourcing, could have a material adverse effect on results of operations, financial position and cash flows.

We generally do not have guaranteed future sales of our products. Further, when we enter into fixed price contracts with some of our customers, we take the risk for cost overruns.

As is customary in our business, we do not generally have long-term contracts with most of our aftermarket customers and, therefore, do not have guaranteed future sales. Although we have long-term contracts with many of our OEM customers, many of those customers may terminate the contracts on short notice and, in most cases, our customers have not committed to buy any minimum quantity of our products. In addition, in certain cases, we must anticipate the future volume of orders based upon the historic purchasing patterns of customers and upon our discussions with customers as to their anticipated future requirements, and this anticipated future volume of orders may not materialize.

We also have entered into multi-year, fixed-price contracts with some of our customers, pursuant to which we have agreed to perform the work for a fixed price and, accordingly, realize all the benefit or detriment resulting from any decreases or increases in the costs of making these products. This risk is greater in a high inflationary environment, such as currently. Sometimes we accept a fixed-price contract for a product that we have not yet produced, and this increases the risk of cost overruns or delays in the completion of the design and manufacturing of the product. Most of our contracts do not permit us to recover increases in raw material prices, taxes or labor costs.

We intend to pursue acquisitions. Our business may be adversely affected if we cannot consummate acquisitions on satisfactory terms, or if we cannot effectively integrate acquired operations.

A significant portion of our growth has occurred through acquisitions. Any future growth through acquisitions will be partially dependent upon the continued availability of suitable acquisition candidates at favorable prices and upon advantageous terms and conditions. We intend to pursue acquisitions that we believe will present opportunities consistent with our overall business strategy. However, we may not be able to find suitable acquisition candidates to purchase or may be unable to acquire desired businesses or assets on economically acceptable terms or may be unable to receive necessary regulatory approvals or support. In addition, we may not be able to raise the capital necessary to fund future acquisitions. Because we may actively pursue a number of opportunities simultaneously, we may encounter unforeseen expenses, complications and delays, including regulatory complications or difficulties in employing sufficient staff and maintaining operational and management oversight.

We regularly engage in discussions with respect to potential acquisition and investment opportunities. If we consummate an acquisition, our capitalization and results of operations may change significantly. Future acquisitions could result in margin dilution and further likely result in the incurrence of additional debt and contingent liabilities and an increase in interest and amortization expenses or periodic impairment charges related to goodwill and other intangible assets as well as significant charges relating to integration costs.

Acquisitions involve risks that the businesses acquired will not perform in accordance with expectations and that business judgments concerning the value, strengths and weaknesses of businesses acquired will prove incorrect. In addition, we may not be able to successfully integrate any business we acquire into our existing business. The successful integration of new businesses, with the most significant recent acquisition being the DART Aerospace acquisition in the third quarter of fiscal 2022, depends on our ability to manage these new businesses and cut excess costs. The successful integration of future acquisitions may also require substantial attention from our senior management and the management of the acquired business, which could decrease the time that they have to service, attract customers and develop new products and services or attend to other acquisition opportunities.

Our indebtedness could adversely affect our financial health and could harm our ability to react to changes to our business and prevent us from fulfilling our obligations under our indebtedness.

We have a significant amount of indebtedness. As of September 30, 2022, our total indebtedness, excluding approximately \$31 million in letters of credit outstanding, was approximately \$20 billion, which was 123.5% of our total book capitalization.

In addition, we may be able to incur substantial additional indebtedness in the future. As of September 30, 2022, we had approximately \$779 million of unused commitments under our revolving credit facility. Although our senior secured credit facility and the indentures governing the various senior secured and senior subordinated notes outstanding (the "Indentures") contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of significant qualifications and exceptions, and the indebtedness incurred in compliance with these qualifications and exceptions could be substantial. A breach of any of the covenants or an inability to comply with the required leverage ratio could result in a default under the senior secured credit facility or the Indentures.

An increase in our indebtedness could also have other important consequences to investors. For example, it could:

- increase our vulnerability to general economic downturns and adverse competitive and industry conditions;
- increase the risk we are subjected to downgrade or put on a negative watch by the ratings agencies;
- require us to dedicate a substantial portion of our cash flows from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital requirements, capital expenditures, acquisitions, research and development efforts and other general corporate requirements;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- place us at a competitive disadvantage compared to competitors that have less debt; and
- limit, along with the financial and other restrictive covenants contained in the documents governing our indebtedness, among other things, our ability to borrow additional funds, make investments and incur liens.

All of our debt under the senior secured credit facility, which includes \$7.3 billion in term loans and a revolving credit facility of \$810 million, bears interest at variable rates primarily based on the London interbank offered rate ("LIBOR") for deposits of U.S. dollars. Accordingly, if LIBOR or other variable interest rates increase, our debt service expense will also increase. In order to mitigate the interest rate risk of these variable rate borrowings, we entered into interest rate swap and cap agreements that cover a significant portion of the existing variable rate debt. The Company's objective is to maintain an allocation of at least 75% fixed rate and 25% variable rate debt thereby limiting its exposure to changes in near-term interest rates. As of September 30, 2022, approximately 85% of our total debt was fixed rate. For information about our interest rate swap and cap agreements, refer to Note 21, "Derivatives and Hedging Instruments," in the notes to the consolidated financial statements included herein.

In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intended to stop compelling banks to submit rates for the calculation of LIBOR after 2021. The discontinuation date for submission and publication of rates for the remaining tenors of USD LIBOR (one-month, three-month, six-month and twelve-month) was subsequently extended by the ICE Benchmark Administration (the administrator of LIBOR) until June 30, 2023. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after 2023. Similarly, it is not possible to predict whether LIBOR will continue to be viewed as an acceptable market benchmark, what rate or rates may become acceptable alternatives to LIBOR, or what effect these changes in views or alternatives may have on financial markets for LIBOR-linked financial instruments. While the U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, has chosen the secured overnight financing rate (“SOFR”) as the recommended risk-free reference rate for the U.S. (calculated based on repurchase agreements backed by treasury securities), we cannot currently predict the extent to which this index will gain widespread acceptance as a replacement for LIBOR. It is not possible to predict the effect of these changes, other reforms or the establishment of alternative reference rates. In February 2020, in connection with Amendment No. 7 and the Refinancing Facility Agreement (herein, “Amendment No. 7”) to the Second Amended and Restated Credit Agreement dated as of June 4, 2014 (the “Credit Agreement”), we amended our Credit Agreement to include a provision for the determination of an alternative reference interest rate. Additionally, with respect to our derivatives portfolio, we have elected the LIBOR protocols issued by the International Swaps and Derivatives Association, but the discontinuation of LIBOR may also require our derivative agreements to be amended in some way. Once the alternative interest rate has replaced LIBOR, our future interest expense could be impacted.

Our indebtedness increases the possibility that we may be unable to generate cash sufficient to pay, when due, the principal of, interest on or other amounts due in respect of our indebtedness, including the Indentures. We cannot assure that our business will generate sufficient cash flow from operations or that future borrowings will be available to us under the senior secured credit facility or otherwise in amounts sufficient to enable us to service our indebtedness. If we cannot service our debt, we will have to take actions such as reducing or delaying capital investments, selling assets, restructuring or refinancing our debt or seeking additional equity capital.

To service our indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control and any failure to meet our debt service obligations could harm our business, financial condition and results of operations.

Our ability to make payments on and to refinance our indebtedness, including the Indentures, amounts borrowed under the senior secured credit facility, amounts due under our trade receivable securitization facility (“Securitization Facility”), and to fund our operations, will depend on our ability to generate cash in the future, which, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

We cannot assure that our business will generate sufficient cash flow from operations, or that future borrowings will be available to us under the senior secured credit facility or otherwise in amounts sufficient to enable us to service our indebtedness, including the amounts borrowed under the senior secured credit facility, amounts borrowed under our Securitization Facility and the Indentures, or to fund our other liquidity needs. If we cannot service our debt, we will have to take actions such as reducing or delaying capital investments, selling assets, restructuring or refinancing our debt or seeking additional equity capital. We cannot assure that any of these remedies could, if necessary, be effected on commercially reasonable terms, or at all. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of existing or future debt instruments, the Securitization Facility, the Indentures and the senior secured credit facility may restrict us from adopting any of these alternatives. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness on acceptable terms and would otherwise adversely affect the Indentures.

The terms of the senior secured credit facility and Indentures may restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

Our senior secured credit facility and the Indentures contain a number of restrictive covenants that impose significant operating and financial restrictions on TD Group, TransDigm Inc. and its subsidiaries (in the case of the senior secured credit facility) and TransDigm Inc. and its subsidiaries (in the case of the Indentures) and may limit their ability to engage in acts that may be in our long-term best interests. The senior secured credit facility and Indentures include covenants restricting, among other things, the ability of TD Group, TransDigm Inc. and its subsidiaries (in the case of the senior secured credit facility) and TransDigm Inc. and its subsidiaries (in the case of the Indentures) to:

- incur or guarantee additional indebtedness or issue preferred stock;
- pay distributions on, redeem or repurchase our capital stock or redeem or repurchase our subordinated debt;
- make investments;
- sell assets;

- enter into agreements that restrict distributions or other payments from our restricted subsidiaries to us;
- incur or allow to exist liens;
- consolidate, merge or transfer all or substantially all of our assets;
- engage in transactions with affiliates;
- create unrestricted subsidiaries; and
- engage in certain business activities.

A breach of any of these covenants could result in a default under the senior secured credit facility or the Indentures. If any such default occurs, the lenders under the senior secured credit facility and the holders of the senior secured and senior subordinated notes may elect to declare all outstanding borrowings, together with accrued interest and other amounts payable thereunder, to be immediately due and payable. The lenders under the senior secured credit facility also have the right in these circumstances to terminate any commitments they have to provide further borrowings. In addition, following an event of default under the senior secured credit facility, the lenders under that facility will have the right to proceed against the collateral granted to them to secure the debt, which includes our available cash, and they will also have the right to prevent us from making debt service payments on the senior subordinated notes. If the debt under the senior secured credit facility or the senior secured or subordinated notes were to be accelerated, we cannot assure that our assets would be sufficient to repay in full our debt.

We are dependent on our executive officers, senior management team and highly trained employees and any work stoppage, difficulty hiring similar employees, or ineffective succession planning could adversely affect our business.

Because our products are complicated and highly engineered, we depend on an educated and trained workforce. Historically, there has been substantial competition for skilled personnel in the aerospace and defense industry, and we could be adversely affected by a shortage of skilled employees. We may not be able to fill new positions or vacancies created by expansion or turnover or attract and retain qualified personnel. We cannot be assured that we can continue to hire, train and retain qualified employees at current wage rates since we operate in a competitive labor market, and there are currently significant inflationary and other pressures on wages.

Reduction in force actions, such as the actions primarily taken in fiscal 2020 and fiscal 2021 to reduce our workforce to align operations with customer demand as a result of the COVID-19 pandemic, could result in difficulty in rehiring capable employees to refill the positions eliminated as needed once business recovers.

Although we believe that our relations with our employees are satisfactory, we cannot assure that we will be able to negotiate a satisfactory renewal of collective bargaining agreements or that our employee relations will remain stable. Because we strive to limit the volume of finished goods inventory, any work stoppage could materially and adversely affect our ability to provide products to our customers.

In addition, our success depends in part on our ability to attract and motivate our senior management and key employees. Achieving this objective may be difficult due to a variety of factors, including fluctuations in economic and industry conditions, competitors' hiring practices, and the effectiveness of our compensation programs. Competition for qualified personnel can be intense. If we are unable to effectively provide for the succession of key personnel, senior management and our executive officers, including our President, Chief Executive Officer and Director, our business, results of operations, cash flows and financial condition may be adversely affected. The Company's Board of Directors continually monitors this risk and we believe that the Company's succession plan, together with our straightforward strategy, clear value drivers, decentralized nature and the quality of managers running our operating units helps to mitigate this risk.

Risks Related to our Operations

Our sales to manufacturers of aircraft are cyclical, and a downturn in sales to these manufacturers may adversely affect us.

Our sales to manufacturers of large commercial aircraft, such as Boeing, Airbus, and related OEM suppliers, as well as manufacturers of business jets have historically experienced periodic downturns. In the past, these sales have been affected by airline profitability, which is impacted by, among other things, fuel and labor costs, price competition, interest rates, downturns in the global economy and national and international events. In addition, sales of our products to manufacturers of business jets are impacted by, among other things, downturns in the global economy. In recent years, such as in fiscal 2021 and the second half of fiscal 2020, we have experienced decreased sales across the commercial OEM sector driven primarily by the decrease in production by Boeing and Airbus related to reduced demand in the commercial aerospace industry from the COVID-19 pandemic, and airlines deferring or cancelling orders. Regulatory and quality challenges, such as with Boeing's 737 MAX aircraft and 787 aircraft, also has an adverse impact. Downturns adversely affect our results of operations, financial position and cash flows.

Our business is dependent on the availability of certain components and raw materials from suppliers.

Our business is affected by the price and availability of the raw materials and component parts that we use to manufacture our components. Our business, therefore, could be adversely impacted by factors affecting our suppliers (such as the destruction of our suppliers' facilities or their distribution infrastructure, a work stoppage or strike by our suppliers' employees or the failure of our suppliers to provide materials of the requisite quality), or by increased costs of such raw materials or components if we were unable to pass along such price increases to our customers.

The COVID-19 pandemic has continued to disrupt the global supply chain. We currently are experiencing supply shortages and inflationary pressures for certain components and raw materials that are important to our manufacturing process, particularly electronic parts. Expected growth in the global economy may exacerbate these pressures on us and our suppliers, and we expect these supply chain challenges and cost impacts to continue for the foreseeable future. Because we strive to limit the volume of raw materials and component parts on hand, our business could be adversely affected if we were unable to obtain these raw materials and components from our suppliers in the quantities we require or on favorable terms. Although we believe in most cases that we could identify alternative suppliers, or alternative raw materials or component parts, the lengthy and expensive aviation authority and OEM certification processes associated with aerospace products could prevent efficient replacement of a supplier, raw material or component part.

We face significant competition.

We operate in a highly competitive global industry and compete against a number of companies. Competitors in our product lines are both U.S. and foreign companies and range in size from divisions of large public corporations to small privately-held entities. We believe that our ability to compete depends on high product performance, consistent high quality, short lead-time and timely delivery, competitive pricing, superior customer service and support and continued certification under customer quality requirements and assurance programs. We may have to adjust the prices of some of our products to stay competitive.

Climate-related regulations designed to address climate change may result in additional compliance costs.

Our operations and the products we sell are currently subject to rules limiting emissions and to other climate-related regulations in certain jurisdictions where we operate. The increased prevalence of global climate change concerns may result in new regulations that may negatively impact us, our suppliers and customers. We are continuing to evaluate short-, medium- and long-term risks related to climate change. We cannot predict what environmental legislation or regulations will be enacted in the future, how existing or future laws or regulations will be administered or interpreted, or what environmental conditions may be found to exist. Compliance with any new or more stringent laws or regulations, or stricter interpretations of existing laws, could require additional expenditures by us or our suppliers, in which case, the costs of raw materials and component parts could increase.

As a whole, because our manufacturing facilities primarily engage in assembly and light manufacturing and because we do not maintain any transportation infrastructure, we have relatively low Scope 1 and Scope 2 emissions. Accordingly, we do not anticipate any material adverse impact from increased carbon regulation directly on our manufacturing operations. Further, because of our wide portfolio of hundreds of thousands of products, we do not anticipate any material adverse impact from the reliance on a supplier or group of suppliers that may be subject to climate risks. However, regulation that would have a material adverse impact on air travel could have a material adverse impact on our business. Given the political significance and uncertainty around these issues, we cannot predict how legislation, regulation, and increased awareness of these issues will affect our operations and financial condition. We have established a science-aligned greenhouse gas emissions reduction target of at least a 50% reduction in our Scope 1 and Scope 2 emissions on an absolute basis by the year 2031. Fiscal 2019 is the selected baseline year for TransDigm that we will compare against as we make progress towards our emissions reduction goal. We continue to evaluate ways to reduce our energy and water consumption and lower our greenhouse gas emissions through energy efficiency measures, the purchase of green power and other actions.

Our operations depend on our manufacturing facilities, which are subject to physical and other risks that could disrupt production.

Our operations and those of our customers and suppliers have been and may again be subject to natural disasters, climate change-related events, pandemics or other business disruptions, which could seriously harm our results of operation and increase our costs and expenses. Some of our manufacturing facilities are located in regions that may be impacted by severe weather events, such as increased storm frequency or severity in the Atlantic and fires in hotter and drier climates. These could result in potential damage to our physical assets as well as disruptions in manufacturing activities. Some of our manufacturing facilities are located in areas that may be at risk due to rising sea levels. Moreover, some of our manufacturing facilities are located in areas that could experience decreased access to water due to climate issues.

We are also vulnerable to damage from other types of disasters, including power loss, fire, explosions, floods, communications failures, terrorist attacks and similar events. Disruptions could also occur due to health-related outbreaks and crises, cyber attacks, computer or equipment malfunction (accidental or intentional), operator error or process failures. Should insurance or other risk transfer mechanisms, such as our existing disaster recovery and business continuity plans, be insufficient to recover all costs, we could experience a material adverse effect on our business, results of operations, financial position and cash flows.

Operations and sales outside of the United States may be subject to additional risks.

Our net sales to foreign customers were approximately \$1.9 billion for the fiscal year ended September 30, 2022. A number of risks inherent in international operations could have a material adverse effect on our results of operations, including war, sanctions, global health crises, currency fluctuations, difficulties in staffing and managing multinational operations, general economic and political uncertainties and potential for social unrest in countries in which we operate, limitations on our ability to enforce legal rights and remedies, restrictions on the repatriation of funds, change in trade policies, tariff regulation, difficulties in obtaining export and import licenses and the risk of government financed competition.

Issues with the global supply chain can also rise due to some of the aforementioned risks, as well as the availability and cost of raw materials to suppliers, merchandise quality or safety issues, shipping and transport availability and cost, increases in wage rates and taxes, transport security, inflation and other factors relating to the suppliers and the countries in which they are located or from which they import. Such issues are often beyond our control and could adversely affect our operations and profitability. Furthermore, the Company is subject to laws and regulations, such as the Foreign Corrupt Practices Act, UK Bribery Act and similar local anti-bribery laws, which generally prohibit companies and their employees, agents and contractors from making improper payments for the purpose of obtaining or retaining business. Failure to comply with these laws could subject the Company to civil and criminal penalties that could materially adversely affect the Company's results of operations, financial position and cash flows.

We are monitoring the ongoing conflict between Russia and Ukraine and the related export controls and financial and economic sanctions imposed on certain industry sectors, including the aviation sector, and parties in Russia by the U.S., the U.K., the European Union and others. Although the conflict has not resulted in a direct material adverse impact on TransDigm's business to date, the implications of the Russia and Ukraine conflict in the short-term and long-term are difficult to predict at this time. Factors such as increased energy costs, increased freight costs, the availability of certain raw materials for aircraft manufacturers, embargoes on flights from Russian airlines, sanctions on Russian companies, and the stability of Ukrainian customers could impact the global economy and aviation sector.

We are subject to certain unique business risks as a result of supplying equipment and services to the U.S. Government.

Companies engaged in supplying defense-related equipment and services to U.S. Government agencies, whether through direct contracts with the U.S. Government or as a subcontractor to customers contracting with the U.S. Government, are subject to business risks specific to the defense industry. These risks include the ability of the U.S. Government to unilaterally:

- suspend us from receiving new contracts based on alleged violations of procurement laws or regulations;
- terminate existing contracts;
- revoke required security clearances;
- reduce the value of existing contracts; and
- audit our contract-related costs and fees, including allocated indirect costs.

Most of our U.S. Government contracts can be terminated by the U.S. Government at its convenience without significant notice. Termination for convenience provisions provide only for our recovery of costs incurred or committed, settlement expenses and profit on the work completed prior to termination.

On contracts for which the price is based on cost, the U.S. Government may review our costs and performance, as well as our accounting and general business practices. Based on the results of such audits, the U.S. Government may adjust our contract-related costs and fees, including allocated indirect costs. In addition, under U.S. Government purchasing regulations, some of our costs, including most financing costs, amortization of intangible assets, portions of research and development costs, and certain marketing expenses may not be subject to reimbursement.

Furthermore, even where the price is not based on cost, the U.S. Government may seek to review our costs to determine whether our pricing is “fair and reasonable.” Our subsidiaries are periodically subject to pricing reviews and government buying agencies that purchase some of our subsidiaries’ products are periodically subject to audits by the DOD Office of Inspector General (“OIG”) with respect to prices paid for such products. In the third quarter of fiscal 2019, we voluntarily refunded \$16.0 million to the U.S. Government following an OIG audit, and the DOD has requested refunds of \$20.8 million in response to another OIG audit completed in the first quarter of fiscal 2022. In addition, our defense-related business has been the subject of an ongoing Congressional inquiry by the House Oversight Committee; Congressional inquiries are costly and time consuming for our management and could distract from our ability to effectively manage the business. As a result of these reviews, audits and inquiries, we could be subject to providing further refunds to the U.S. Government, we could be asked to enter into an arrangement whereby our prices would be based on cost, the DOD could seek to pursue alternative sources of supply for our parts, or the U.S. Government could take other adverse actions with respect to our contracts. Any of those occurrences could lead to a reduction in our revenue from, or the profitability of certain of our supply arrangements with, certain agencies and buying organizations of the U.S. Government. Further, negative publicity relating to the results of any audit, inquiry or subsequent hearing or the like could negatively impact our stock price.

If a government inquiry or investigation uncovers improper or illegal activities, we could be subject to civil or criminal penalties or administrative sanctions, including contract termination, fines, forfeiture of fees, suspension of payment and suspension or debarment from doing business with U.S. Government agencies, any of which could materially adversely affect our reputation, business, financial condition, results of operations and cash flows.

Moreover, U.S. Government purchasing regulations contain a number of additional operational requirements, which do not apply to entities not engaged in government contracting. Failure to comply with such government contracting requirements could result in civil and criminal penalties that could have a material adverse effect on the Company’s results of operations.

Our business may be adversely affected if we would lose our government or industry approvals or if more stringent government regulations are enacted or if industry oversight is increased.

The aerospace industry is highly regulated in the U.S. and in other countries. In order to sell our products, we and the products we manufacture must be certified by the FAA, the DOD and similar agencies in foreign countries and by individual manufacturers. If new and more stringent government regulations are adopted or if industry oversight increases, we might incur significant expenses to comply with any new regulations or heightened industry oversight. In addition, if material authorizations or approvals were revoked or suspended, our business would be adversely affected.

In addition to the aviation approvals, we are at times required to obtain approval from U.S. Government agencies and similar agencies elsewhere in the world to export our products. U.S. laws and regulations applicable to us include the Arms Export Control Act, the International Traffic in Arms Regulations (“ITAR”), the Export Administration Regulations (“EAR”) and the trade sanctions laws and regulations administered by the United States Department of the Treasury’s Office of Foreign Assets Control (“OFAC”). EAR restricts the export of commercial and dual-use products and technical data to certain countries, while ITAR restricts the export of defense products, technical data and defense services.

Failure to obtain approval to export or determination by the U.S. Government or similar agencies elsewhere in the world that we failed to receive required approvals or licenses could eliminate or restrict our ability to sell our products outside the United States or other country of origin, and the penalties that could be imposed by the U.S. Government or other applicable government for failure to comply with these laws could be significant.

We could incur substantial costs as a result of data protection concerns.

The interpretation and application of data protection laws in the U.S. and Europe, including but not limited to the General Data Protection Regulation (the “GDPR”) and the California Consumer Privacy Act (the “CCPA”), and elsewhere are uncertain and evolving. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. Complying with these various laws is difficult and could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business. Further, although we have implemented internal controls and procedures designed to ensure compliance with the GDPR, CCPA and other privacy-related laws, rules and regulations (collectively, the “Data Protection Laws”), there can be no assurance that our controls and procedures will enable us to be fully compliant with all Data Protection Laws.

Increased cybersecurity threats and more sophisticated and targeted computer crime have posed and could continue to pose a risk to our information technology systems and a disruption to or breach in the security of such systems, if material, could have adverse effects on our result of operations and financial condition.

We rely extensively on information technology systems to manage and operate our business, some of which are managed by third parties. The security and functionality of these information technology systems, and the processing of data by these systems, are critical to our business operations. If these systems, or any part of the systems, are damaged, intruded upon, attacked, shutdown or cease to function properly (whether by planned upgrades, force majeure, telecommunications failures, criminal acts, including hardware or software break-ins or extortion attempts, or viruses, or other cybersecurity incidents) and we suffer any resulting interruption in our ability to manage and operate our business or if our products are affected, our results of operations and financial condition could be materially adversely affected. In fact, we have experienced data security incidents, although these have not had a material impact on our financial results. Furthermore, the Company has access to classified, sensitive, confidential, or personal data or information that is subject to privacy and security laws, regulations, or other contractually-imposed controls.

Despite our use of reasonable and appropriate technical security controls and monitoring, security breaches, theft, misplaced, lost or corrupted data, programming, or employee errors and/or malfeasance have led and could in the future lead to the compromise or improper use of such sensitive, confidential, or personal data or information. Such events may result in possible negative consequences, such as fines, ransom demands, penalties, failure to comply with laws governing sensitive data, negative publicity, loss of reputation, loss of intellectual property, loss of competitiveness or customers, increased security and compliance costs or other negative consequences. Further, the amount of insurance coverage that we maintain may be inadequate to cover claims or liabilities relating to a cybersecurity incident. Depending on the nature and magnitude of these events, they may have an adverse impact on our results of operations or financial condition.

Risks Related to Legal and Regulatory Matters

We could incur substantial costs as a result of violations of or liabilities under environmental laws and regulations.

Our operations and facilities are subject to a number of federal, state, local and foreign environmental laws and regulations that govern, among other things, discharges of pollutants into the air and water, the generation, handling, storage and disposal of hazardous materials and wastes, the remediation of contamination and the health and safety of our employees. Environmental laws and regulations may require that the Company investigate and remediate the effects of the release or disposal of materials at sites associated with past and present operations. Certain facilities and third-party sites utilized by subsidiaries of the Company have been identified as potentially responsible parties under the federal superfund laws and comparable state laws. The Company is currently involved in the investigation and remediation of a number of sites under applicable laws.

Estimates of the Company's environmental liabilities are based on current facts, laws, regulations and technology. These estimates take into consideration the Company's prior experience and professional judgment of the Company's environmental advisors. Estimates of the Company's environmental liabilities are further subject to uncertainties regarding the nature and extent of site contamination, the range of remediation alternatives available, evolving remediation standards, imprecise engineering evaluations and cost estimates, the extent of corrective actions that may be required and the number and financial condition of other potentially responsible parties, as well as the extent of their responsibility for the remediation.

Accordingly, as investigations and remediations proceed, it is likely that adjustments in the Company's accruals will be necessary to reflect new information. The amounts of any such adjustments could have a material adverse effect on the Company's results of operations or cash flows in a given period. Based on currently available information, however, the Company does not believe that future environmental costs in excess of those accrued with respect to sites for which the Company has been identified as a potentially responsible party are likely to have a material adverse effect on the Company's financial condition.

We may be subject to periodic litigation and regulatory proceedings, which may adversely affect our business and financial performance.

From time to time, we are involved in lawsuits and regulatory actions brought or threatened against us in the ordinary course of business. These actions and proceedings may involve claims for, among other things, compensation for alleged personal injury, workers' compensation, employment discrimination, or breach of contract. In addition, we may be subject to class action lawsuits, including those involving allegations of violations of consumer product statutes or the Fair Labor Standards Act and state wage and hour laws. Due to the inherent uncertainties of litigation, we cannot accurately predict the ultimate outcome of any such actions or proceedings. The outcome of litigation, particularly class action lawsuits and regulatory actions, is difficult to assess or quantify, as plaintiffs may seek recovery of very large or indeterminate amounts in these types of lawsuits, and the magnitude of the potential loss may remain unknown for substantial periods of time. In addition, plaintiffs in many types of actions may seek punitive damages, civil penalties, consequential damages or other losses, or injunctive or declaratory relief. These proceedings could result in substantial cost and may require us to devote substantial resources to defend ourselves. The ultimate resolution of these matters through settlement, mediation, or court judgment could have a material impact on our financial condition, results of operations, and cash flows.

We could be adversely affected if one of our products cause an aircraft to crash.

Our operations expose us to potential liabilities for personal injury or death as a result of the failure of an aircraft product that we have designed, manufactured or serviced. While we maintain liability insurance to protect us from future product liability claims, in the event of product liability claims our insurers may attempt to deny coverage or any coverage we have may not be adequate. We also may not be able to maintain insurance coverage in the future at an acceptable cost. Any liability not covered by insurance or for which third party indemnification is not available could result in significant liability to us.

In addition, a crash caused by one of our products could damage our reputation for quality products. We believe our customers consider safety and reliability as key criteria in selecting a provider of aircraft products. If a crash were to be caused by one of our products, or if we were to otherwise fail to maintain a satisfactory record of safety and reliability, our ability to retain and attract customers may be materially adversely affected.

Risks Related to Financial Matters

We have recorded a significant amount of intangible assets, which may never generate the returns we expect.

Mergers and acquisitions have resulted in significant increases in identifiable intangible assets and goodwill. Identifiable intangible assets, which primarily include trademarks, trade names, customer relationships, and technology, were approximately \$2.8 billion at September 30, 2022, representing approximately 15% of our total assets. Goodwill recognized in accounting for the mergers and acquisitions was approximately \$8.6 billion at September 30, 2022, representing approximately 48% of our total assets. We may never realize the full value of our identifiable intangible assets and goodwill, and to the extent we were to determine that our identifiable intangible assets or our goodwill were impaired within the meaning of applicable accounting standards, we would be required to write-off the amount of any impairment.

We may be subject to risks relating to changes in our tax rates or exposure to additional income tax liabilities.

We are subject to income taxes in the U.S. and various non-U.S. jurisdictions. The Company's domestic and international tax liabilities are dependent upon the location of earnings among these different jurisdictions. The Company's future results of operations could be adversely affected by changes in the Company's effective tax rate as a result of changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets, challenges by tax authorities or changes in tax laws or regulations. In addition, the amount of income taxes paid by the Company is subject to ongoing audits by U.S. federal, state and local tax authorities and by non-U.S. tax authorities. If these audits result in assessments different from amounts reserved, future financial results may include unfavorable adjustments to the Company's tax liabilities, which could have a material adverse effect on the Company's results of operations.

We do not regularly declare and pay quarterly or annual cash dividends on our stock.

Notwithstanding special cash dividends, of which the most recent declaration by the Company's Board of Directors in the fourth quarter of fiscal 2022 in the amount of \$18.50 per outstanding share of common stock, we do not anticipate declaring regular quarterly or annual cash dividends on our common stock or any other equity security in the foreseeable future.

The amounts that may be available to us to pay future special cash dividends are restricted under our debt and other agreements. Any payment of special cash dividends on our common stock in the future will be at the discretion of our Board of Directors and will depend on our results of operations, earnings, capital requirements, financial condition, future prospects, contractual restrictions and other factors deemed relevant by our Board of Directors. Therefore, shareholders should not rely on regular quarterly or annual dividend income from shares of our common stock and should not rely on special dividends with any regularity or at all.

General Risks

Our commercial business is sensitive to the number of flight hours that our customers' planes spend aloft, the size and age of the worldwide aircraft fleet and our customers' profitability. These items are, in turn, affected by general economic and geopolitical and other worldwide conditions.

Our commercial business is directly affected by, among other factors, changes in RPMs, the size and age of the worldwide aircraft fleet, the percentage of the fleet that is out-of-warranty and changes in the profitability of the commercial airline industry. RPMs and airline profitability have historically been correlated with the general economic environment, although national and international events also play a key role. For example, in addition to the current COVID-19 pandemic and the adverse impact it has had on the airline industry, past examples in which the airline industry has been negatively affected include downturns in the global economy, higher fuel prices, increased security concerns among airline customers following the events of September 11, 2001, the Severe Acute Respiratory Syndrome ("SARS") epidemic, and conflicts abroad. Additional examples include future geopolitical or other worldwide events, such as war, terrorist acts, or additional worldwide infectious disease outbreaks.

In addition, global market and economic conditions have been challenging due to turbulence in the U.S. and international markets and economies and have prolonged declines in business and consumer spending. As a result of the substantial reduction in airline traffic resulting from the aforementioned events, the airline industry incurred large losses and financial difficulties. Some carriers parked or retired a portion of their fleets and reduced workforces and flights. During periods of reduced airline profitability, some airlines may delay purchases of spare parts, preferring instead to deplete existing inventories, and delay refurbishments and discretionary spending. If demand for spare parts decreases, there would be a decrease in demand for certain products. An adverse change in demand could impact our results of operations, collection of accounts receivable and our expected cash flow generation from current and acquired businesses which may adversely impact our financial condition and access to capital markets.

U.S. military spending is dependent upon the U.S. defense budget.

The military and defense market is significantly dependent upon government budget trends, particularly the DOD budget. In addition to normal business risks, our supply of products to the U.S. Government is subject to unique risks largely beyond our control. DOD budgets could be negatively impacted by several factors, including, but not limited to, a change in defense spending policy as a result of the presidential election or otherwise, the U.S. Government's budget deficits, spending priorities (e.g., shifting funds to efforts to combat the impact of the pandemic or efforts to assist Ukraine in the Russia and Ukraine conflict), the cost of sustaining the U.S. military presence internationally and possible political pressure to reduce U.S. Government military spending, each of which could cause the DOD budget to remain unchanged or to decline. A significant decline in U.S. military expenditures could result in a reduction in the amount of our products sold to the various agencies and buying organizations of the U.S. Government.

Our stock price may be volatile, and an investment in our common stock could suffer a decline in value.

There has been significant volatility in the market price and trading volume of equity securities, which is unrelated to the operating performance of the companies issuing the securities. These market fluctuations may negatively affect the market price of our common stock. Shareholders may not be able to sell their shares at or above the purchase price due to fluctuations in the market price of our common stock. Such changes could be caused by changes in our operating performance or prospects, including possible changes due to the cyclical nature of the aerospace industry and other factors such as fluctuations in OEM and aftermarket ordering, which could cause short-term swings in profit margins. Or such changes could be unrelated to our operating performance, such as changes in market conditions affecting the stock market generally or the stocks of aerospace companies or changes in the outlook for our common stock, such as changes to or the confidence in our business strategy, changes to or confidence in our management, or expectations for future growth of the Company. Global health crises such as the COVID-19 pandemic could also cause significant volatility in the market price.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

TransDigm's principal owned properties (defined as greater than 20,000 square feet or related to a principal operation) as of September 30, 2022 are as follows:

Location	Reporting Segment	Square Footage
Brea, CA ⁽¹⁾	Airframe	315,000
Stillington, United Kingdom	Airframe	274,800
Montreal, Canada	Airframe	271,700
Miesbach, Germany	Power & Control	242,000
Liberty, SC ⁽¹⁾	Power & Control	219,000
Waco, TX	Power & Control	218,800
Liverpool, NY	Power & Control	197,100
Ingolstadt, Germany	Airframe	191,900
Kent, OH ⁽¹⁾	Airframe	185,000
Bridport, United Kingdom	Airframe	174,700
Lillington, NC	Power & Control	162,400
Union Gap, WA ⁽¹⁾	Airframe	144,400
Coachella, CA ⁽¹⁾	Power & Control	140,000
Phoenix, AZ	Airframe	138,700
Paks, Hungary	Airframe	137,800
Los Angeles, CA	Power & Control	131,000
Bohemia, NY ⁽¹⁾	Power & Control	124,000
Buena Park, CA	Power & Control	115,000
Llangeinor, United Kingdom	Airframe	110,000
Bourges, France	Power & Control	109,400
Westbury, NY	Power & Control	106,800
Kent, WA ⁽¹⁾	Airframe	100,000
Painesville, OH	Power & Control	94,200
Valencia, CA ⁽¹⁾	Airframe	88,400
Letchworth, United Kingdom	Airframe	88,200
Placentia, CA	Airframe	86,600
Addison, IL ⁽¹⁾	Power & Control	83,300
Sarralbe, France	Power & Control	77,900
Niort, France	Power & Control	69,000
Prescott, AZ	Airframe	66,200
Clearwater, FL	Power & Control	64,200
South Euclid, OH	Power & Control	60,000
Wichita, KS	Power & Control	57,000
Branford, CT	Airframe	52,000
Hawkesbury, Canada	Airframe	50,000
Avenel, NJ	Power & Control	48,500
Rancho Cucamonga, CA ⁽¹⁾	Power & Control	47,000
Pennsauken, NJ	Airframe	38,000
Ryde, United Kingdom	Power & Control	33,200
Rancho Cucamonga, CA	Airframe	32,700
Melaka, Malaysia	Power & Control	24,800
Cheveley, United Kingdom	Airframe	24,000
Broussard, LA	Airframe	22,000
Deerfield Beach, FL	Non-aviation	20,000

⁽¹⁾ Subject to mortgage liens under our senior secured credit facility, our 6.25% secured notes due March 15, 2026 ("2026 Secured Notes") and our 8.00% secured notes due December 15, 2025 ("2025 Secured Notes").

TransDigm's principal leased properties (defined as greater than 20,000 square feet or related to a principal operation) as of September 30, 2022 are as follows:

Location	Reporting Segment	Square Footage
Everett, WA	Airframe	339,300
East Camden, AR	Power & Control	276,000
Whippany, NJ	Power & Control	230,500
Nittambuwa, Sri Lanka	Airframe	168,000
Santa Ana, CA	Airframe	159,200
Dayton, NV	Airframe	144,000
Tijuana, Mexico	Airframe	141,000
Holmestrand, Norway	Airframe	139,500
Anaheim, CA	Airframe	138,900
Marlow, United Kingdom	Airframe	116,100
Tijuana, Mexico	Power & Control	112,800
Melbourne, FL	Power & Control	107,000
Farnborough, United Kingdom	Power & Control	103,400
Goldsboro, NC	Power & Control	101,000
Fullerton, CA	Airframe	100,000
Kunshan, China	Airframe	99,500
Sylmar, CA	Airframe	93,000
Elkhart, IN	Non-aviation	91,500
Davis Junction, IL	Airframe	84,500
Miesbach, Germany	Power & Control	80,800
Kunshan, China	Non-aviation	75,300
Camarillo, CA	Power & Control	70,000
Gloucester, United Kingdom	Airframe	69,100
Matamoros, Mexico	Power & Control	60,500
Chihuahua, Mexico	Airframe	55,000
Portland, Oregon	Airframe	50,000
Sugar Grove, IL	Airframe	45,000
Zunyi, China	Power & Control	43,000
Tempe, AZ	Power & Control	40,200
Fort Collins, CO	Airframe	40,000
Collegeville, PA	Airframe	37,000
Chongqing, China	Airframe	36,300
Rancho Santa Margarita, CA	Airframe	35,200
Joensuu, Finland	Airframe	32,300
Eloy, AZ	Airframe	28,100
Ashford, United Kingdom	Power & Control	28,000
Nogales, Mexico	Airframe	27,000
Redhill, United Kingdom	Airframe	22,700
Ravenna, OH	Airframe	22,500
Pennsauken, NJ	Airframe	20,500
Cleveland, OH	Corporate	20,100

Our Cleveland, OH and Pasadena, CA corporate facilities house our principal executive offices, and we currently lease approximately 20,100 square feet and 5,300 square feet, respectively, for those purposes. TransDigm also leases certain of its other non-material facilities. Management believes that our machinery, plants and offices are in satisfactory operating condition and that it will have sufficient capacity to meet foreseeable future needs without incurring significant additional capital expenditures.

ITEM 3. LEGAL PROCEEDINGS

The Company is involved in various claims and legal actions arising in the ordinary course of business. SEC regulations require us to disclose certain information about environmental proceedings when a governmental authority is a party to the proceedings if we reasonably believe that such proceedings may result in monetary sanctions above a stated threshold. Pursuant to such regulations, the Company uses a threshold of \$1 million or more for purposes of determining whether disclosure of any such proceedings is required as we believe matters under this threshold are not material to the Company. While the Company is currently involved in certain legal proceedings, it believes the results of these proceedings will not have a material adverse effect on its financial condition, results of operations, or cash flows.

Information with respect to our legal proceedings is contained in Note 15, “Commitments and Contingencies,” within the notes to the consolidated financial statements included herein.

PART II

ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is traded on the New York Stock Exchange, or NYSE, under the ticker symbol “TDG.”

Holders

As of October 18, 2022, there were 36 stockholders of record of our common stock and approximately 251,000 beneficial stockholders, which includes an estimated number of stockholders who have their shares held in their accounts by banks and brokers.

Dividends

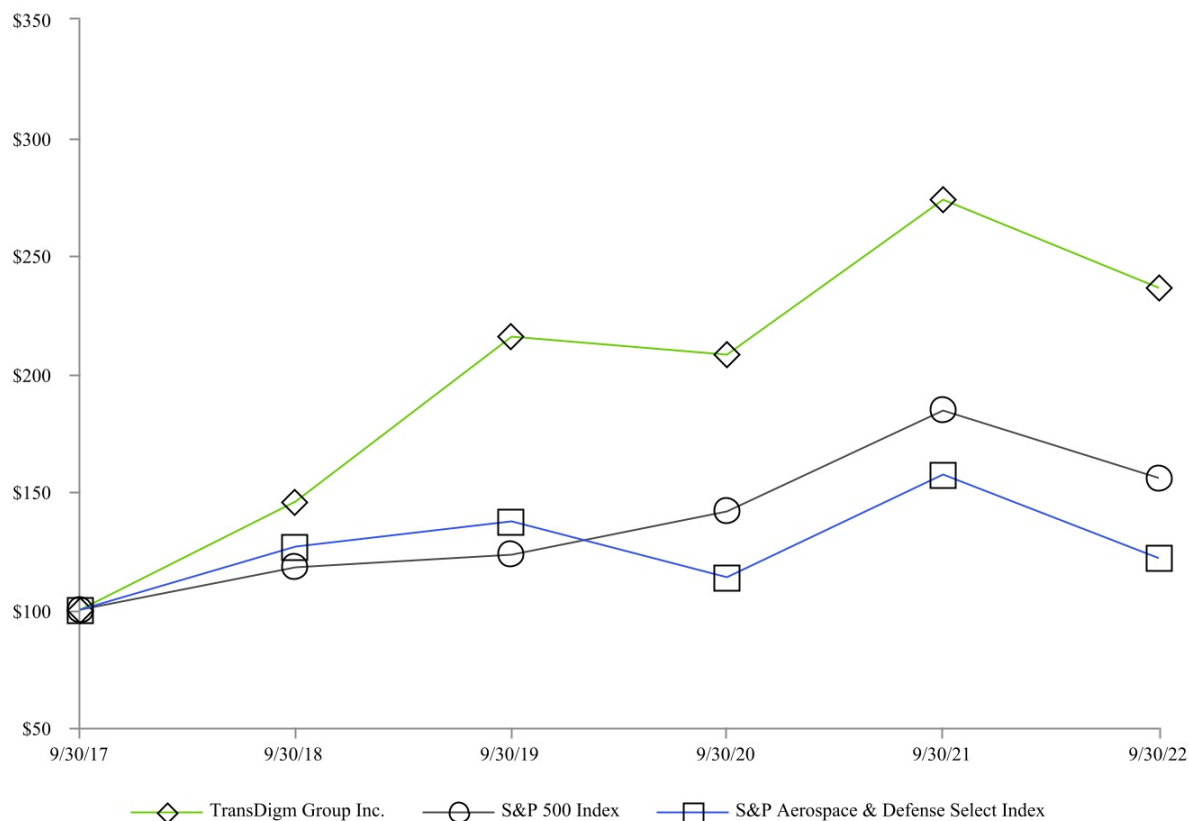
In August 2022, TD Group’s Board of Directors declared a special cash dividend of \$18.50 on each outstanding share of common stock and cash dividend equivalent payments on options granted under its equity compensation plans to non-directors. Directors received an \$18.50 reduction in the strike price of their respective vested options in lieu of a cash payment.

Performance Graph

Set forth below is a line graph comparing the cumulative total return of a hypothetical investment in the shares of common stock of TD Group with the cumulative total return of a hypothetical investment in each of the S&P 500 Index and the S&P Aerospace & Defense Select Index. An investment of \$100 (with reinvestment of all dividends) is assumed to have been made in our common stock and in each of the indexes on September 30, 2017, and its relative performance is tracked through September 30, 2022.

The following performance graph and related information shall not be deemed “soliciting material” nor to be “filed” with the SEC, nor shall such information be incorporated by reference into any future filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, each as amended, except to the extent we specifically incorporate it by reference into such filing.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among TransDigm Group Inc., the S&P 500 Index and S&P Aerospace & Defense Select Index



*\$100 invested on 9/30/2017 in stock or index, including reinvestment of dividends.
Copyright 2022 Standard & Poor's, a division of S&P Global. All rights reserved.

	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	9/30/2022
TransDigm Group Inc.	100.00	145.63	215.50	207.98	273.40	236.22
S&P 500 Index	100.00	117.91	122.93	141.55	184.02	155.55
S&P Aerospace & Defense Select Index	100.00	126.38	137.35	113.48	156.92	121.51

Purchases of Equity Securities by the Issuer or Affiliated Purchaser

On January 27, 2022, the Board of Directors of the Company authorized a new stock repurchase program to permit repurchases of its outstanding common stock not to exceed \$2,200 million in the aggregate (the “\$2,200 million stock repurchase program”), replacing the \$650 million stock repurchase program previously authorized by the Board on November 8, 2017, subject to any restrictions specified in the Credit Agreement and/or Indentures governing the Company’s existing Notes. There is no expiration date for this program.

No repurchases were made under the program during the fourth quarter of fiscal 2022. During the second and third quarters of fiscal 2022, the Company repurchased 1,490,413 shares of common stock at an average price of \$612.13 per share, for a total amount of \$912 million. The repurchased shares of common stock are classified as treasury stock in the statement of changes in stockholders' deficit. As of September 30, 2022, \$1,288 million remains available for repurchase under the \$2,200 million stock repurchase program.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read together with TD Group's consolidated financial statements and the related notes included elsewhere in this report. The following discussion may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed under the heading entitled "Risk Factors" included elsewhere in this report. These risks could cause our actual results to differ materially from any future performance suggested below.

Overview

For fiscal year 2022, we generated net sales of \$5,429 million, gross profit of \$3,099 million or 57.1% of net sales, and net income attributable to TD Group of \$866 million. The COVID-19 pandemic has continued to have an adverse impact on our net sales, net income and EBITDA As Defined when compared to pre-pandemic levels. Pre-pandemic, and as our business continues to recover from the pandemic, we believe we have achieved steady, long-term growth in sales and improvements in operating performance due to our competitive strengths and through execution of our value-driven operating strategy. More specifically, we believe that focusing our businesses on our value-driven operating strategy of obtaining profitable new business, carefully controlling the cost structure and pricing our highly engineered value-added products to fairly reflect the value we provide and the resources required to do so has historically resulted in improvements in gross profit and income from operations over the long-term.

Our selective acquisition strategy has also been an important contribution to the growth of our business. The integration of acquisitions into our existing businesses combined with implementing our proven operating strategy has historically resulted in improvements in the financial performance of the acquired business.

We believe our key competitive strengths include:

Large and Growing Installed Product Base with Aftermarket Revenue Stream. We provide components to a large and growing installed base of aircraft to which we supply aftermarket products. We estimate that our products are installed on over 100,000 commercial transport, regional transport, military and general aviation fixed wing turbine aircraft and rotary wing aircraft.

Diversified Revenue Base. We believe that our diversified revenue base reduces our dependence on any particular product, platform or market channel and has been a significant factor in maintaining our financial performance. Our products are installed on almost all of the major commercial aircraft platforms now in production. We expect to continue to develop new products for military and commercial applications. Our current initiatives include creating new products that are more environmentally friendly, such as radiation-free exciters, and creating new products that will help further improve commercial airlines' efforts to keep passengers healthy and safe, such as touch-free aircraft lavatory suite products.

Our business strategy is made up of two key elements: (1) a value-driven operating strategy focused around our three core value drivers and (2) a selective acquisition strategy.

Value-Driven Operating Strategy. Our three core value drivers are:

- **Obtaining Profitable New Business.** We attempt to obtain profitable new business by using our technical expertise and application skill and our detailed knowledge of our customer base and the individual niche markets in which we operate. We have regularly been successful in identifying and developing both aftermarket and OEM products to drive our growth.
- **Improving Our Cost Structure.** We are committed to maintaining and continuously improving our lean cost structure through detailed attention to the cost of each of the products that we offer and our organizational structure, with a focus on reducing the cost of each.
- **Providing Highly Engineered Value-Added Products to Customers.** We focus on the engineering, manufacturing and marketing of a broad range of highly engineered niche products that we believe provide value to our customers. We believe we have been consistently successful in communicating to our customers the value of our products. This has generally enabled us to price our products to fairly reflect the value we provide and the resources required to do so.

Selective Acquisition Strategy. We selectively pursue the acquisition of proprietary aerospace component businesses when we see an opportunity to create value through the application of our three core value-driven operating strategies. The aerospace industry, in particular, remains highly fragmented, with many of the companies in the industry being small private businesses or small non-core operations of larger businesses. We have significant experience among our management team in executing acquisitions and integrating acquired businesses into our company and culture. As of the date of this report, we have successfully acquired approximately 87 businesses and product lines since our formation in 1993. Many of these acquisitions have been integrated into an existing TransDigm production facility, which enables a higher production capacity utilization, which in turn improves gross profit levels due to the ability to spread the fixed manufacturing overhead costs over higher production volume. In the case of larger acquisitions that consist of multiple operating units (such as the Esterline acquisition), we may pursue opportunities to divest certain acquired operating units that are not in line with our long-term acquisition strategy.

Acquisitions and divestitures during the most recent three fiscal years are described in Note 2, “Acquisitions and Divestitures,” in the notes to the consolidated financial statements included herein.

The commercial aerospace industry, in particular, has been significantly disrupted, both domestically and internationally, by the pandemic. The pandemic has resulted in governments around the world implementing stringent measures to help control the spread of the virus, including quarantines, “shelter in place” and “stay at home” orders, travel restrictions, business curtailments and other measures. As a result, demand for travel declined at a rapid pace beginning in the second half of fiscal 2020 and has remained depressed compared to pre-pandemic levels. Although worldwide air traffic remains significantly lower than pre-pandemic levels, RPMs continued to steadily improve in fiscal 2022 and many aircraft parked by airlines have been returned to service. Commercial air travel in domestic markets continued to lead the air traffic recovery in fiscal 2022 with certain domestic markets nearing pre-pandemic air traffic levels. The pace of the international air traffic recovery has been slower than the domestic recovery, but international RPMs made positive strides in fiscal 2022 and are catching up to the domestic air traffic recovery. The commercial OEM market is continuing to show signs of recovery with airlines returning to the commercial OEMs to place orders; however, the commercial OEM supply chain challenges impacting manufacturers such as Boeing and Airbus are slowing the pace of new aircraft manufacturing. The exact pace and timing of the commercial air travel recovery remains uncertain and continues to evolve.

The defense aerospace market has been impacted by the COVID-19 pandemic to a lesser extent than the commercial aerospace market with this impact arising primarily from supply chain shortages. Additionally, within the defense market, the pace of U.S. government defense spending outlays and government funding reprioritization provides for uncertainty.

The COVID-19 pandemic has also disrupted the global supply chain and availability of raw materials. The disruption in the supply chain has resulted in increased freight costs, raw material costs and labor costs from the ongoing inflationary environment. Our business has been adversely affected and could continue to be adversely affected by disruptions in our ability to timely obtain raw materials and components from our suppliers in the quantities we require or on favorable terms. Although we believe in most cases that we could identify alternative suppliers, or alternative raw materials or component parts, the lengthy and expensive aviation authority and OEM certification processes associated with aerospace products could prevent efficient replacement of a supplier, raw material or component part.

Because the duration of the pandemic is unclear, it is difficult to forecast a precise impact on the Company’s future results. We will continue to evaluate the nature and extent to which COVID-19 will impact our business, supply chain, consolidated results of operations, financial condition, and liquidity.

We are also monitoring the ongoing conflict between Russia and Ukraine and the related export controls and financial and economic sanctions imposed on certain industry sectors, including the aviation sector, and parties in Russia by the U.S., the U.K., the European Union and others. Although the conflict has not resulted in a direct material adverse impact on TransDigm’s business to date, the implications of the Russia and Ukraine conflict in the short-term and long-term are difficult to predict at this time. Factors such as increased energy costs, the availability of certain raw materials for aircraft manufacturers, embargoes on flights from Russian airlines, sanctions on Russian companies, and the stability of Ukrainian customers could impact the global economy and aviation sector.

Results of Operations

The following table sets forth, for the periods indicated, certain operating data of the Company, including presentation of the amounts as a percentage of net sales (amounts in millions, except per share data):

	Fiscal Years Ended September 30,			
	2022	% of Net Sales	2021	% of Net Sales
Net sales	\$ 5,429	100.0 %	\$ 4,798	100.0 %
Cost of sales	2,330	42.9 %	2,285	47.6 %
Selling and administrative expenses	748	13.8 %	685	14.3 %
Amortization of intangible assets	136	2.5 %	137	2.9 %
Income from operations	2,215	40.8 %	1,691	35.2 %
Interest expense, net	1,076	19.8 %	1,059	22.1 %
Refinancing costs	1	— %	37	0.8 %
Other expense (income)	18	0.3 %	(51)	(1.1)%
Gain on sale of businesses, net	(7)	(0.1)%	(69)	(1.4)%
Income tax provision	261	4.8 %	34	0.7 %
Income from continuing operations	866	16.0 %	681	14.2 %
Less: Net income attributable to noncontrolling interests	(1)	— %	(1)	— %
Income from continuing operations attributable to TD Group	865	15.9 %	680	14.2 %
Income from discontinued operations, net of tax	1	— %	—	— %
Net income attributable to TD Group	\$ 866	16.0 %	\$ 680	14.2 %
Net income applicable to TD Group common stockholders	\$ 780 ⁽¹⁾	14.4 %	\$ 607 ⁽¹⁾	12.7 %
Earnings per share:				
Earnings per share from continuing operations—basic and diluted	\$ 13.38 ⁽²⁾		\$ 10.41 ⁽²⁾	
Earnings per share from discontinued operations—basic and diluted	0.02 ⁽²⁾		— ⁽²⁾	
Earnings per share	\$ 13.40		\$ 10.41	
Cash dividends declared per common share	\$ 18.50		\$ —	
Weighted-average shares outstanding—basic and diluted	58.2		58.4	
Other Data:				
EBITDA	\$ 2,456 ⁽³⁾		\$ 2,027 ⁽³⁾	
EBITDA As Defined	\$ 2,646 ⁽³⁾	48.7 %	\$ 2,189 ⁽³⁾	45.6 %

⁽¹⁾ Net income applicable to TD Group common stockholders represents net income attributable to TD Group less special dividends paid on participating securities, including dividend equivalent payments of \$86 million and \$73 million for the fiscal years ended September 30, 2022 and 2021, respectively.

⁽²⁾ Earnings per share from continuing operations is calculated by dividing net income applicable to TD Group common stockholders, excluding income from discontinued operations, net of tax, by the basic and diluted weighted average common shares outstanding. Earnings per share from discontinued operations is calculated by dividing income from discontinued operations, net of tax, by the basic and diluted weighted average common shares outstanding.

⁽³⁾ Refer to “Non-GAAP Financial Measures” in this discussion and analysis for additional information and limitations regarding these non-GAAP financial measures, including a reconciliation to the comparable GAAP financial measure.

Fiscal year ended September 30, 2022 compared with fiscal year ended September 30, 2021**Total Company**

- **Net Sales.** Net organic sales and acquisition and divestiture sales and the related dollar and percentage changes for the fiscal years ended September 30, 2022 and 2021 were as follows (amounts in millions):

	Fiscal Years Ended		Change	% Change Net Sales
	September 30, 2022	September 30, 2021		
Organic sales	\$ 5,355	\$ 4,665	\$ 690	14.4 %
Acquisition and divestiture sales	74	133	(59)	(1.2)%
Net sales	\$ 5,429	\$ 4,798	\$ 631	13.2 %

Organic sales represent net sales from existing businesses owned by the Company, excluding sales from acquisitions and divestitures. Acquisition sales represent net sales from acquired businesses for the period up to one year subsequent to their respective acquisition date. Therefore, beginning in the second quarter of fiscal 2022, Cobham Aero Connectivity's ("CAC's") net sales, including the comparable period in the prior year, are included in the organic growth calculation (acquisition date was January 2021). Beginning in the third quarter of fiscal 2022, DART Aerospace ("DART") is included in the acquisitions and divestitures classification due to the completion of the acquisition by TransDigm. Divestiture sales represent net sales from businesses up to the date the respective divestiture was completed. Acquisition and divestiture sales are excluded from organic sales due to the variability in the nature, timing and extent of acquisitions and divestitures and resulting variable impact on underlying trends. Refer to Note 2, "Acquisitions and Divestitures," in the notes to the consolidated financial statements included herein for further information on the Company's recent acquisition and divestiture activity.

The increase in organic sales of \$690 million for the fiscal year ended September 30, 2022 compared to the fiscal year ended September 30, 2021 is primarily related to increases in commercial aftermarket sales (\$478 million, an increase of 44.8%) and commercial OEM sales (\$221 million, an increase of 23.8%); partially offset by a decrease in defense sales (\$52 million, a decrease of 2.2%). The increase in commercial aftermarket sales is primarily attributable to the continued recovery in commercial air travel demand, particularly the increase in the utilization of narrow-body aircraft, and air cargo demand and the resulting higher flight hours in fiscal 2022 compared to fiscal 2021. The increase in OEM sales is primarily attributable to a higher volume of narrow-body aircraft deliveries by aircraft manufacturers to airlines and also production rate increases of narrow-body aircraft compared to fiscal 2021. Partially offsetting the OEM sales growth are wide-body aircraft production and delivery slowdowns due to the COVID-19 pandemic adversely impacting international travel particularly in the first half of fiscal 2022 and also due to Boeing's ongoing regulatory and quality challenges with the 737 MAX aircraft (particularly in China) and the 787 aircraft. The decrease in defense sales is attributable to continued supply chain shortages resulting in shipment delays and delays in U.S. government defense spend outlays.

The decrease in acquisition and divestiture sales for the fiscal year ended September 30, 2022 is primarily attributable to the divestitures of ScioTeq and TREALITY Simulation Visual Systems ("ScioTeq and TREALITY"), Technical Airborne Components ("TAC"), Racial Acoustics ("Racial") and Avista, Inc. ("Avista"), all of which were completed in fiscal 2021, partially offset by the acquisitions of CAC and DART.

- Cost of Sales and Gross Profit.** Cost of sales increased by \$45 million, or 2.0%, to \$2,330 million for the fiscal year ended September 30, 2022 compared to \$2,285 million for the fiscal year ended September 30, 2021. Cost of sales and the related percentage of net sales for the fiscal years ended September 30, 2022 and 2021 were as follows (amounts in millions):

	Fiscal Years Ended		Change	% Change
	September 30, 2022	September 30, 2021		
Cost of sales - excluding costs below	\$ 2,383	\$ 2,277	\$ 106	4.7 %
% of net sales	43.9 %	47.5 %		
Non-cash stock and deferred compensation expense	19	13	6	46.2 %
% of net sales	0.3 %	0.3 %		
Acquisition integration costs	4	4	—	— %
% of net sales	0.1 %	0.1 %		
Inventory acquisition accounting adjustments	3	6	(3)	(50.0)%
% of net sales	0.1 %	0.1 %		
COVID-19 pandemic restructuring costs	—	29	(29)	(100.0)%
% of net sales	— %	0.6 %		
Loss contract amortization	(39)	(55)	16	(29.1)%
% of net sales	(0.7)%	(1.1)%		
Foreign currency (gains) losses	(40)	11	(51)	(463.6)%
% of net sales	(0.7)%	0.2 %		
Total cost of sales	\$ 2,330	\$ 2,285	\$ 45	2.0 %
% of net sales	42.9 %	47.6 %		
Gross profit (Net sales less Total cost of sales)	\$ 3,099	\$ 2,513	\$ 586	23.3 %
Gross profit percentage (Gross profit / Net sales)	57.1 %	52.4 %		

Excluding the specific components to cost of sales listed above, the change in cost of sales during the fiscal year ended September 30, 2022, which decreased as a percentage of net sales, was primarily driven by a favorable sales mix, specifically, higher commercial aftermarket sales as a percentage of net sales compared to commercial OEM net sales in the prior fiscal year ended September 30, 2021. In addition, despite increased freight, raw material, and labor costs resulting from the ongoing inflationary environment and disruption within the global supply chain and labor markets, the continued application of our three core value-driven operating strategies (obtaining profitable new business, continually improving our cost structure and providing highly engineered value-added products to customers) coupled with fixed overhead costs incurred being spread over a higher production volume, resulted in gross profit as a percentage of net sales increasing by 4.7 percentage points to 57.1% for the fiscal year ended September 30, 2022 from 52.4% for the fiscal year ended September 30, 2021.

Regarding the specific components to cost of sales listed above, COVID-19 pandemic restructuring costs were not material in fiscal 2022 and foreign exchange rates, particularly the U.S. dollar compared to the British pound and the euro, strengthened considerably in the fourth quarter of fiscal 2022, resulting in favorable movement compared to the prior year when the U.S. dollar depreciated against both the British pound and euro resulting in foreign currency losses.

Non-cash stock and deferred compensation expense is higher due to the adoption of a new deferred compensation plan for certain members of non-executive management in fiscal 2022, the impact of the new stock option grants awarded in fiscal 2022 and the impact of a modification approved by the Board of Directors of the performance criteria for the fiscal 2021 and 2020 grants. Refer to Note 18, "Stock-Based Compensation," in the notes to the consolidated financial statements included herein for further information.

- Selling and Administrative Expenses.** Selling and administrative expenses increased by \$63 million to \$748 million, or 13.8% of net sales, for the fiscal year ended September 30, 2022 from \$685 million, or 14.3% of net sales, for the fiscal year ended September 30, 2021. Selling and administrative expenses and the related percentage of net sales for the fiscal years ended September 30, 2022 and 2021 were as follows (amounts in millions):

	Fiscal Years Ended		Change	% Change
	September 30, 2022	September 30, 2021		
Selling and administrative expenses - excluding costs below	\$ 563	\$ 534	\$ 29	5.4 %
% of net sales	10.4 %	11.1 %		
Non-cash stock and deferred compensation expense	165	117	48	41.0 %
% of net sales	3.0 %	2.4 %		
Bad debt expense	9	(2)	11	550.0 %
% of net sales	0.2 %	— %		
Acquisition integration costs	7	10	(3)	(30.0)%
% of net sales	0.1 %	0.2 %		
Acquisition and divestiture transaction-related expenses	4	15	(11)	(73.3)%
% of net sales	0.1 %	0.3 %		
COVID-19 pandemic restructuring costs	—	11	(11)	(100.0)%
% of net sales	— %	0.2 %		
Total selling and administrative expenses	\$ 748	\$ 685	\$ 63	9.2 %
% of net sales	13.8 %	14.3 %		

Excluding the specific components to selling and administrative expenses listed above, the change in selling and administrative expenses during the fiscal year ended September 30, 2022 improved as a percentage of net sales compared to the prior fiscal year ended September 30, 2021. This is a result of the continued realization of the cost mitigation measures that were enacted in the second half of fiscal 2020 and in fiscal 2021 in response to the COVID-19 pandemic partially offset by increased costs incurred for labor, travel and other sales support and administrative costs due to the ongoing inflationary environment and the lessening of travel restrictions from the pandemic enabling a return to conducting meetings and other business-related matters in person.

Non-cash stock and deferred compensation expense is higher due to the adoption of a new deferred compensation plan for certain members of non-executive management in fiscal 2022, the impact of the new stock option grants awarded in fiscal 2022 and the impact of a modification approved by the Board of Directors of the performance criteria for the fiscal 2021 and 2020 grants. Refer to Note 18, “Stock-Based Compensation,” in the notes to the consolidated financial statements included herein for further information.

The increase in bad debt expense is primarily attributable to certain non-U.S. customers and also the Russia and Ukraine conflict. The decrease in acquisition and divestiture transaction-related expenses is due to the lack of divestitures occurring in fiscal 2022.

- Amortization of Intangible Assets.** Amortization of intangible assets was \$136 million for the fiscal year ended September 30, 2022 compared to \$137 million for the fiscal year ended September 30, 2021. The slight decrease in amortization expense of \$1 million was due to the amortization expense recognized on intangible assets from the fiscal 2022 acquisition of DART being offset by sales order backlog recorded in connection with the CAC acquisition becoming fully amortized in the first quarter of fiscal 2022.
- Interest Expense-net.** Interest expense-net includes interest on borrowings outstanding, amortization of debt issuance costs, original issue discount and premium, revolving credit facility fees, finance leases and interest income. Interest expense-net increased \$17 million, or 1.6%, to \$1,076 million for the fiscal year ended September 30, 2022 from \$1,059 million for the fiscal year ended September 30, 2021. The increase in interest expense-net was primarily due to an increase in LIBOR compared to the prior year, which adversely impacted the interest expense on the approximately 15% of gross debt that is variable rate and not hedged via an interest rate swap or cap. This was partially offset by a \$12 million increase in interest income, the repayment of \$200 million previously drawn on the revolving credit facility in the first quarter of fiscal 2022 and the favorable impact from refinancing activities executed in fiscal 2021. The weighted average interest rate for cash interest payments on total borrowings outstanding for the fiscal year ended September 30, 2022 was 5.3%.
- Refinancing Costs.** Refinancing costs of \$1 million were recorded for the fiscal year ended September 30, 2022. Refinancing costs of \$37 million recorded for the fiscal year ended September 30, 2021 were primarily related to fees incurred on the early redemption of the 6.50% senior subordinated notes due 2024 (the “2024 Notes”) and the 6.50% senior subordinated notes due 2025 (the “2025 Notes”) that occurred in the second and third quarters of fiscal 2021.

- **Other Expense (Income).** Other expense (income) was \$18 million for the fiscal year ended September 30, 2022 compared to \$(51) million for the fiscal year ended September 30, 2021. Other expense for the fiscal year ended September 30, 2022 was primarily driven by a pension settlement charge of approximately \$22 million for the Esterline Retirement Plan. Refer to Note 13, “Retirement Plans,” in the notes to the consolidated financial statements included herein for further information. Partially offsetting this expense was the non-service related components of net periodic benefit costs on the Company’s defined benefit pension plans (\$3 million). Other income for the fiscal year ended September 30, 2021 was primarily driven by \$24 million recorded for the settlement of the insurance claim for Leach International Europe’s Niort, France operating facility fire in August 2019. This primarily represents the insurance proceeds received in excess of the carrying value of the damaged fixed assets and inventory and proceeds from the business interruption settlement. The remaining \$27 million is primarily driven by non-service related components of net periodic benefit income on the Company’s defined benefit pension plans (\$14 million), receipt of payment of Canadian governmental subsidies (\$7 million) and the release of a litigation reserve (\$3 million).
- **Gain on Sale of Businesses-net.** Gain on sale of businesses-net of \$7 million was recorded for the fiscal year ended September 30, 2022, and is primarily driven by cash proceeds received from a final working capital settlement for the ScioTeq and TREALITY divestiture (\$3 million). Gain on sale of businesses-net of \$69 million was recorded for the fiscal year ended September 30, 2021, and is primarily related to the net gain on sale recognized on the ScioTeq and TREALITY and TAC divestitures. Refer to Note 2, “Acquisitions and Divestitures,” in the notes to the consolidated financial statements included herein for further information.
- **Income Tax Provision.** Income tax expense as a percentage of income before income taxes was approximately 23.2% for the fiscal year ended September 30, 2022 compared to 4.8% for the fiscal year ended September 30, 2021. The Company’s significantly lower effective tax rate for the fiscal year ended September 30, 2021 was primarily due to a one time benefit from a tax election made on the Company’s fiscal 2020 U.S. federal income tax return enabling the Company to utilize its net interest deduction limitation carryforward pursuant to IRC Section 163(j) resulting in the release of the valuation allowance applicable to such carryforward during the fourth quarter of fiscal 2021.
- **Income from Discontinued Operations, net of tax.** Income from discontinued operations, net of tax, for the fiscal year ended September 30, 2022 was \$1 million, which was driven by cash proceeds received during the first quarter of fiscal 2022 from a final working capital settlement for the Souriau-Sunbank Connection Technologies (“Souriau-Sunbank”) divestiture. There was no income from discontinued operations, net of tax, for the fiscal year ended September 30, 2021. Refer to Note 23, “Discontinued Operations,” in the notes to the consolidated financial statements included herein for further information.
- **Net Income Attributable to TD Group.** Net income attributable to TD Group increased \$186 million, or 27.4%, to \$866 million for the fiscal year ended September 30, 2022 compared to net income attributable to TD Group of \$680 million for the fiscal year ended September 30, 2021, primarily as a result of the factors referenced above.
- **Earnings per Share.** Basic and diluted earnings per share from continuing operations and discontinued operations were \$13.38 and \$0.02, respectively, for the fiscal year ended September 30, 2022. Basic and diluted earnings per share from continuing operations was \$10.41 for the fiscal year ended September 30, 2021. There was no impact on earnings per share from discontinued operations for the fiscal year ended September 30, 2021. Net income attributable to TD Group for the fiscal year ended September 30, 2022 of \$866 million was decreased by dividend equivalent payments of \$86 million, or \$1.47 per share, resulting in net income applicable to TD Group common stockholders of \$780 million, or \$13.40 per share. Net income attributable to TD Group for the fiscal year ended September 30, 2021 of \$680 million was decreased by dividend equivalent payments of \$73 million, or \$1.24 per share, resulting in net income applicable to TD Group common stockholders of \$607 million, or \$10.41 per share.

Business Segments

- **Segment Net Sales.** Net sales by segment for the fiscal years ended September 30, 2022 and 2021 were as follows (amounts in millions):

	Fiscal Years Ended September 30,					
	2022	% of Net Sales	2021	% of Net Sales	Change	% Change
Power & Control	\$ 2,873	52.9 %	\$ 2,550	53.1 %	\$ 323	12.7 %
Airframe	2,391	44.1 %	2,083	43.5 %	308	14.8 %
Non-aviation	165	3.0 %	165	3.4 %	—	— %
Net sales	\$ 5,429	100.0 %	\$ 4,798	100.0 %	\$ 631	13.2 %

Net sales for the Power & Control segment increased \$323 million, an increase of 12.7%, for the fiscal year ended September 30, 2022. The sales increase resulted primarily from increases in organic sales in commercial aftermarket (\$241 million, an increase of 43.5%) and commercial OEM (\$83 million, an increase of 18.7%); partially offset by a decrease in organic defense sales (\$28 million, a decrease of 1.9%). The increase in commercial aftermarket sales is primarily attributable to the continued recovery in commercial air travel demand, particularly the increase in the utilization of narrow-body aircraft, and air cargo demand and the resulting higher flight hours compared to fiscal 2021. The increase in commercial OEM sales is primarily attributable to a higher volume of narrow-body aircraft deliveries by aircraft manufacturers to airlines and also production rate increases of narrow-body aircraft compared to fiscal 2021. Partially offsetting the commercial OEM sales growth are wide-body aircraft production and delivery slowdowns due to the COVID-19 pandemic adversely impacting international travel particularly in the first half of fiscal 2022 and also due to Boeing's ongoing regulatory and quality challenges with the 737 MAX aircraft (particularly in China) and the 787 aircraft. The decrease in defense sales is attributable to continued supply chain shortages resulting in shipment delays and delays in U.S. government defense spend outlays. The change in acquisition and divestiture sales was not material.

Net sales for the Airframe segment increased \$308 million, an increase of 14.8%, for the fiscal year ended September 30, 2022. The sales increase resulted primarily from increases in organic sales in commercial aftermarket (\$237 million, an increase of 46.2%) and commercial OEM (\$138 million, an increase of 29.3%); partially offset by a decrease in organic defense sales (\$23 million, a decrease of 2.6%). The increase in commercial aftermarket sales is primarily attributable to the continued recovery in commercial air travel demand, particularly the increase in the utilization of narrow-body aircraft, and air cargo demand and the resulting higher flight hours compared to fiscal 2021. The increase in commercial OEM sales is primarily attributable to a higher volume of narrow-body aircraft deliveries by aircraft manufacturers to airlines and also production rate increases of narrow-body aircraft compared to fiscal 2021. Partially offsetting the commercial OEM sales growth are wide-body aircraft production and delivery slowdowns due to the COVID-19 pandemic adversely impacting international travel particularly in the first half of fiscal 2022 and also due to Boeing's ongoing regulatory and quality challenges with the 737 MAX aircraft (particularly in China) and the 787 aircraft. The decrease in defense sales is attributable to continued supply chain shortages resulting in shipment delays and delays in U.S. government defense spend outlays. Acquisition and divestiture sales decreased \$52 million primarily due to the divestitures completed during fiscal 2021, partially offset by the impact of CAC's sales being included in acquisition and divestiture sales through the first quarter of fiscal 2022 and DART's sales beginning in the third quarter of fiscal 2022.

The change in Non-aviation net sales compared to the prior fiscal year was not material.

- **EBITDA As Defined.** Refer to “Non-GAAP Financial Measures” in this discussion and analysis for additional information and limitations regarding these non-GAAP financial measures, including a reconciliation to the comparable GAAP financial measure. EBITDA As Defined by segment for the fiscal years ended September 30, 2022 and 2021 were as follows (amounts in millions):

	Fiscal Years Ended September 30,					
	2022	% of Segment Net Sales	2021	% of Segment Net Sales	Change	% Change
Power & Control	\$ 1,531	53.3 %	\$ 1,319	51.7 %	\$ 212	16.1 %
Airframe	1,121	46.9 %	878	42.2 %	243	27.7 %
Non-aviation	65	39.4 %	62	37.6 %	3	4.8 %
Total segment EBITDA As Defined	2,717	50.0 %	2,259	47.1 %	458	20.3 %
Less: Unallocated corporate expenses	71	1.3 % ⁽¹⁾	70	1.5 % ⁽¹⁾	1	1.4 %
Total Company EBITDA As Defined	\$ 2,646	48.7 % ⁽¹⁾	\$ 2,189	45.6 % ⁽¹⁾	\$ 457	20.9 %

⁽¹⁾ Calculated as a percentage of consolidated net sales.

Organic EBITDA As Defined represents EBITDA As Defined from existing businesses owned by the Company as of September 30, 2022, excluding EBITDA As Defined from acquisitions and divestitures. EBITDA As Defined from acquisitions and divestitures represents EBITDA As Defined from acquired businesses for the period up to one year subsequent to the respective acquisition date and from businesses up to the date the respective divestiture was completed. Refer to Note 2, “Acquisitions and Divestitures,” in the notes to the consolidated financial statements included herein for further information on the Company's recent acquisition and divestiture activity.

EBITDA As Defined for the Power & Control segment increased approximately \$212 million, an increase of 16.1%, resulting from higher organic sales, particularly in the commercial aftermarket and OEM channels. Also contributing to the increase in EBITDA As Defined was the application of our three core value-driven operating strategies and positive leverage on our fixed overhead costs spread over a higher production volume despite the ongoing inflationary environment for freight, labor and certain raw materials. The change in EBITDA As Defined for the Power & Control segment from acquisitions and divestitures was not material for fiscal 2022.

EBITDA As Defined for the Airframe segment increased approximately \$243 million, an increase of 27.7%, resulting primarily from higher organic sales, particularly in the commercial aftermarket and OEM channels. Also contributing to the increase in EBITDA As Defined was the application of our three core value-driven operating strategies and positive leverage on our fixed overhead costs spread over a higher production volume despite the ongoing inflationary environment for freight, labor and certain raw materials. EBITDA As Defined for the Airframe segment from acquisitions and divestitures decreased by \$9 million, primarily due to the impact on the comparable period from the divestitures completed in fiscal year 2021, partially offset by the impact of CAC (only through the first quarter of fiscal 2022) and DART (beginning in the third quarter of fiscal 2022).

The change in Non-aviation EBITDA as Defined compared to the prior fiscal year was not material.

Corporate expenses consist primarily of compensation, benefits, professional services and other administrative costs incurred by the corporate offices. An immaterial amount of corporate expenses is allocated to the operating segments. The change in corporate expenses compared to the prior fiscal year was not material.

Fiscal year ended September 30, 2021 compared with fiscal year ended September 30, 2020

For our results of operations for fiscal 2021 compared with fiscal 2020, refer to the discussion in Item 7. “Management’s Discussion and Analysis of Financial Conditions and Results of Operations” of Form 10-K for the fiscal year ended September 30, 2021, as filed with the Securities and Exchange Commission on November 16, 2021.

Liquidity and Capital Resources

We have historically maintained a capital structure comprising a mix of equity and debt financing. We vary our leverage both to optimize our equity return and to pursue acquisitions. We expect to meet our current debt obligations as they come due through internally generated funds from current levels of operations and/or through refinancing in the debt markets prior to the maturity dates of our debt.

The following tables present selected balance sheet, cash flow and other financial data relevant to the liquidity or capital resources of the Company for the periods specified below (amounts in millions):

	September 30, 2022	September 30, 2021
Selected Balance Sheet Data:		
Cash and cash equivalents	\$ 3,001	\$ 4,787
Working capital (Total current assets less total current liabilities)	4,223	5,367
Total assets	18,107	19,315
Total debt ⁽¹⁾	19,795	19,998
TD Group stockholders’ deficit	(3,773)	(2,916)

⁽¹⁾ Includes debt issuance costs and original issue discount and premiums. Reference Note 12, “Debt,” in the notes to the consolidated financial statements included herein for additional information.

	Fiscal Years Ended September 30,	
	2022	2021
Selected Cash Flow and Other Financial Data:		
Cash flows provided by (used in):		
Operating activities	\$ 948	\$ 913
Investing activities	(553)	(785)
Financing activities	(2,148)	(70)
Capital expenditures	119	105
Ratio of earnings to fixed charges ⁽¹⁾	2.0x	1.7x

⁽¹⁾ For purposes of computing the ratio of earnings to fixed charges, earnings consist of earnings from continuing operations before income taxes plus fixed charges. Fixed charges consist of interest expense, amortization of debt issuance costs, original issue discount and premium and the “interest component” of rental expense.

If the Company has excess cash, it generally prioritizes allocating the excess cash in the following manner: (1) capital spending at existing businesses, (2) acquisitions of businesses, (3) payment of a special dividend and/or repurchases of our common stock and (4) prepayment of indebtedness or repurchase of debt.

In fiscal 2022, the Company returned approximately \$2 billion to shareholders through share repurchases and a special dividend payment. In the second and third quarters of fiscal 2022, the Company repurchased 1,490,413 shares of common stock at an average price of \$612.13 per share, aggregating to approximately \$912 million in repurchases. In August 2022, TransDigm's Board of Directors authorized and declared a special cash dividend of \$18.50 on each outstanding share of common stock and cash dividend equivalent payments on vested options outstanding under its stock incentive plans. The total cash payment of the special dividend, using existing cash on hand, was approximately \$1,045 million. Whether the Company undertakes additional share repurchases, special dividends or other aforementioned activities in fiscal 2023 will depend on prevailing market conditions, the Company's liquidity requirements, contractual restrictions and other factors.

The Company's ability to make scheduled interest payments on, or to refinance, the Company's indebtedness, or to fund non-acquisition related capital expenditures and research and development efforts, will depend on the Company's ability to generate cash in the future. This is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond its control, including the ongoing COVID-19 pandemic.

The Company is continuing to strategically manage the Company's cash and cash equivalents in response to the ongoing inflationary environment, COVID-19 pandemic and related uncertainty of the duration and impact on the Company's business. In the first quarter of fiscal 2022, the Company entered into Amendment No. 9 and Incremental Revolving Credit Assumption Agreement (herein, "Amendment No. 9") to the Credit Agreement, increasing the capacity under the revolving credit facility from \$760 million to \$810 million. The Company also repaid \$200 million previously drawn on the revolving credit facility. In fiscal 2021, due to favorable market conditions in the high yield bond market, the Company refinanced \$1,950 million of its senior subordinated notes resulting in a reduced interest rate (estimated \$35 million reduction in annual interest payments) and an extended maturity date.

As of September 30, 2022, the Company has significant cash liquidity as illustrated in the table presented below (in millions):

	As of September 30, 2022	
Cash and cash equivalents	\$	3,001
Availability on revolving credit facility		779
Cash liquidity	\$	<u>3,780</u>

We believe our significant cash liquidity will allow us to meet our anticipated funding requirements. We expect to meet our short-term cash liquidity requirements (including interest obligations and capital expenditures) through net cash from operating activities, cash on hand and, if needed, draws on the revolving credit facility. Long-term cash liquidity requirements consist primarily of obligations under our long-term debt agreements. There is no maturity on any tranche of term loans or notes until August 2024.

In connection with the continued application of our three core value-driven operating strategies (obtaining profitable new business, continually improving our cost structure and providing highly engineered value-added products to customers), we expect our efforts will continue to generate strong margins and provide sufficient cash provided by operating activities to meet our interest obligations and liquidity needs. We believe our cash provided by operating activities and available borrowing capacity will enable us to make strategic business acquisitions, such as the DART acquisition completed in the third quarter of fiscal 2022 for \$359 million, pay dividends to our shareholders and make opportunistic investments in our own stock, subject to any restrictions in our existing credit agreement and market conditions.

The Company may issue additional debt if prevailing market conditions are favorable to doing so. In addition, the Company may increase its borrowings in connection with acquisitions, if cash flow from operating activities becomes insufficient to fund current operations or for other short-term cash needs or for common stock repurchases or dividends. Our future leverage will also be impacted by the then current conditions of the credit markets.

Operating Activities. The Company generated \$948 million of net cash from operating activities during fiscal 2022 compared to \$913 million during fiscal 2021.

The change in trade accounts receivable during fiscal 2022 was a use of cash of \$190 million compared to a use of cash of \$78 million in fiscal 2021. The increase in the use of cash of \$112 million is primarily attributable to the timing of cash receipts as there were higher sales in the month of September 2022 compared to September 2021. The Company continues to actively manage its accounts receivable, the related agings and collection efforts in response to the COVID-19 pandemic and other factors, such as the Russia and Ukraine conflict.

The change in inventories during fiscal 2022 was a use of cash of \$134 million compared to a source of cash of \$79 million in fiscal 2021. The increase in the use of cash of \$213 million is primarily driven by increased purchasing from higher demand in fiscal 2022 and fiscal 2023 as raw material inventory is up approximately \$109 million compared to at September 30, 2021. The Company continues to actively and strategically manage inventory levels in response to the pandemic and the ongoing supply chain challenges.

The change in accounts payable during fiscal 2022 was a source of cash of \$58 million compared to a source of cash of \$3 million in fiscal 2021. The change is primarily due to increased inventory purchases and the related timing of payments to suppliers.

Investing Activities. Net cash used in investing activities was \$553 million during fiscal 2022, consisting of the acquisitions of DART and certain product line acquisitions made by our Extant Aerospace subsidiary for a total of \$437 million and capital expenditures of \$119 million. This was slightly offset by \$3 million in proceeds received from the final working capital settlement for the ScioTeq and TREALITY divestiture. The Company estimates its capital expenditures in fiscal year 2023 to be approximately 2% to 3% of net sales, which is consistent with its historical annual spend as a percentage of net sales. The Company's capital expenditures incurred from year-to-year are funded using existing cash on hand and are primarily for projects that are consistent with our three core value-driven operating strategies (obtaining profitable new business, continually improving our cost structure and providing highly engineered value-added products to customers).

Net cash used in investing activities was \$785 million during fiscal 2021, consisting primarily of the acquisition of CAC for \$963 million and capital expenditures of \$105 million. This was partially offset by proceeds of \$259 million from the completion of the divestiture of certain businesses and \$24 million of insurance proceeds received from the Leach International Europe fire property claim.

Financing Activities. Net cash used in financing activities was \$2,148 million during fiscal 2022. The use of cash was primarily attributable to \$1,091 million of dividends and dividend equivalent payments, \$912 million in common stock repurchases, the \$200 million repayment of a previous draw on the revolving commitments and repayment on term loans of \$75 million. This was partially offset by \$132 million in proceeds from stock option exercises.

Net cash used in financing activities was \$70 million during fiscal 2021. The use of cash was primarily attributable to the redemption of the 2024 Notes and 2025 Notes for \$1,220 million and \$762 million, respectively, repayments on term loans of \$75 million and dividend equivalent payments of \$73 million. This was partially offset by \$1,189 million in net proceeds from the completion of the 4.625% senior subordinated notes due 2029 (the "4.625% 2029 Notes") offering, \$743 million in net proceeds from the completion of the 4.875% senior subordinated notes due 2029 (the "4.875% 2029 Notes") offering and \$128 million in proceeds from stock option exercises.

Description of Senior Secured Term Loans and Indentures

Senior Secured Term Loans Facility

TransDigm has \$7,298 million in fully drawn term loans (the "Term Loans Facility") and an \$810 million revolving credit facility. The Term Loans Facility consists of three tranches of term loans as follows (aggregate principal amount disclosed is as of September 30, 2022):

Term Loans Facility	Aggregate Principal	Maturity Date	Interest Rate
Tranche E	\$2,155 million	May 30, 2025	LIBOR plus 2.25%
Tranche F	\$3,418 million	December 9, 2025	LIBOR plus 2.25%
Tranche G	\$1,725 million	August 22, 2024	LIBOR plus 2.25%

The Term Loans Facility requires quarterly aggregate principal payments of \$19 million. The revolving commitments consist of two tranches which include up to \$152 million of multicurrency revolving commitments. At September 30, 2022, the Company had \$31 million in letters of credit outstanding and \$779 million in borrowings available under the revolving commitments. Draws on the revolving commitments are subject to an interest rate of 2.50% per annum. The unused portion of the revolving commitments is subject to a fee of 0.5% per annum.

The interest rates per annum applicable to the loans under the Credit Agreement are, at TransDigm's option, equal to either an alternate base rate or an adjusted LIBOR for one, two, three or six-month (or to the extent agreed to by each relevant lender, nine or twelve-month) interest periods chosen by TransDigm, in each case plus an applicable margin percentage. The adjusted LIBOR related to Tranche E, Tranche F and Tranche G term loans are not subject to a floor. At September 30, 2022 and 2021, the applicable interest rates for all existing tranches (which excludes the impact of our interest rate swaps and caps) were 5.92% and 2.33%, respectively, with the increase due to higher LIBOR particularly in the second half of fiscal 2022. Refer to Note 21, "Derivatives and Hedging Activities," for information about how our interest rate swaps and cap agreements are used to hedge and offset, respectively, the variable interest rates on the credit facility.

Fiscal 2022 Amendment to the Credit Agreement

On December 29, 2021, the Company entered into Amendment No. 9 and Incremental Revolving Credit Assumption Agreement (herein, "Amendment No. 9") to the Credit Agreement, which increases the capacity under the revolving credit facility from \$760 million to \$810 million. The terms and conditions that apply to Amendment No. 9 are the same as the terms and conditions that apply to the existing dollar revolving commitments and term loans under the Credit Agreement.

Indentures

The following table represents the senior subordinated and secured notes outstanding as of September 30, 2022:

Description	Aggregate Principal	Maturity Date	Interest Rate
2025 Secured Notes	\$1,100 million	December 15, 2025	8.00%
2026 Secured Notes	\$4,400 million	March 15, 2026	6.25%
6.875% 2026 Notes	\$500 million	May 15, 2026	6.875%
6.375% 2026 Notes	\$950 million	June 15, 2026	6.375%
7.50% 2027 Notes	\$550 million	March 15, 2027	7.50%
5.50% 2027 Notes	\$2,650 million	November 15, 2027	5.50%
4.625% 2029 Notes	\$1,200 million	July 15, 2029	4.625%
4.875% 2029 Notes	\$750 million	October 15, 2029	4.875%

The 6.375% 2026 Notes, the 7.50% 2027 Notes, the 5.50% 2027 Notes, the 4.625% 2029 Notes and the 4.875% 2029 Notes (collectively, the “TransDigm Inc. Notes”) were issued at a price of 100% of the principal amount. The 6.875% 2026 Notes (the “TransDigm UK Notes” and together with the TransDigm Inc. Notes, the “Notes,” are further described below) offered in May 2018 were issued at a price of 99.24% of the principal amount, resulting in gross proceeds of \$496 million. The 2025 Secured Notes were issued at a price 100% of the principal amount. The initial \$3,800 million offering of the 2026 Secured Notes (which, along with the 2025 Secured Notes, are collectively referred to as the “Secured Notes”) was issued at a price of 100% of its principal amount and the subsequent \$200 million and \$400 million offerings of the 2026 Secured Notes in the second quarter of fiscal 2019 and the third quarter of fiscal 2020, respectively, were issued at a price of 101% of their principal amount, resulting in gross proceeds of \$4,411 million.

The Notes do not require principal payments prior to their maturity. Interest under the Notes is payable semi-annually. The Notes represent our unsecured obligations ranking subordinate to our senior debt, as defined in the applicable indentures. The Notes contain many of the restrictive covenants included in the Credit Agreement. TransDigm is in compliance with all of the covenants contained in the Notes.

Guarantor Information

The Notes are subordinated to all of our existing and future senior debt, rank equally with all of our existing and future senior subordinated debt and rank senior to all of our future debt that is expressly subordinated to the Notes. The TransDigm Inc. Notes are fully and unconditionally guaranteed on a senior subordinated unsecured basis by TD Group and TransDigm Inc.'s Domestic Restricted Subsidiaries (as defined in the applicable Indentures). The TransDigm UK Notes are guaranteed on a senior subordinated basis by TransDigm Inc., TD Group and TransDigm Inc.'s Domestic Restricted Subsidiaries. The guarantees of the Notes are subordinated to all of the guarantors' existing and future senior debt, rank equally with all of their existing and future senior subordinated debt and rank senior to all of their future debt that is expressly subordinated to the guarantees of the Notes. The Notes are structurally subordinated to all of the liabilities of TD Group's non-guarantor subsidiaries.

The Secured Notes are senior secured obligations of TransDigm and rank equally in right of payment with all of TransDigm's existing and future senior secured debt, including indebtedness under TransDigm's existing senior secured credit facilities, and are senior in right of payment to all of TransDigm's existing and future senior subordinated debt, including the Notes, TransDigm's other outstanding senior subordinated notes and TransDigm's guarantees in respect of TransDigm UK's outstanding senior subordinated notes. The Secured Notes are guaranteed on a senior secured basis by TD Group, TransDigm UK and TransDigm Inc.'s Domestic Restricted Subsidiaries named in the Secured Notes Indenture. The guarantees of the Secured Notes rank equally in right of payment with all of the guarantors' existing and future senior secured debt and are senior in right of payment to all of their existing and future senior subordinated debt. The Secured Notes are structurally subordinated to all of the liabilities of TransDigm's non-guarantor subsidiaries. The Secured Notes contain many of the restrictive covenants included in the Credit Agreement. TransDigm is in compliance with all of the covenants contained in the Secured Notes.

Separate financial statements of TransDigm Inc. are not presented because the Secured Notes are fully and unconditionally guaranteed on a senior secured basis by TD Group, TransDigm UK and all of TransDigm Inc.'s Domestic Restricted Subsidiaries. TD Group has no significant operations or assets separate from its investment in TransDigm Inc.

Separate financial statements of TransDigm UK are not presented because TransDigm UK's 6.875% 2026 Notes, issued in May 2018, are fully and unconditionally guaranteed on a senior subordinated basis by TD Group, TransDigm Inc. and all of TransDigm Inc.'s Domestic Restricted Subsidiaries. TD Group has no significant operations or assets separate from its investment in TransDigm Inc.

The financial information presented is that of TD Group and the Guarantors, which includes TransDigm Inc. and TransDigm UK, on a combined basis and the financial information of non-issuer and non-guarantor subsidiaries has been excluded. Intercompany balances and transactions between TD Group and Guarantors have been eliminated, and amounts due from, amounts due to, and transactions with non-issuer and non-guarantor subsidiaries have been presented separately.

(in millions)	September 30, 2022	
Current assets	\$	3,954
Goodwill		6,849
Other non-current assets		2,843
Current liabilities		735
Non-current liabilities		20,077
Amounts (from) due to subsidiaries that are non-issuers and non-guarantors - net		(1,334)

(in millions)	Fiscal Year Ended September 30, 2022	
Net sales	\$	4,208
Sales to subsidiaries that are non-issuers and non-guarantors		50
Cost of sales		1,724
Expense from subsidiaries that are non-issuers and non-guarantors - net		69
Income from continuing operations		552
Net income attributable to TD Group		552

Certain Restrictive Covenants in Our Debt Documents

The Credit Agreement and the Indentures governing the Notes and Secured Notes contain restrictive covenants that, among other things, limit the incurrence of additional indebtedness, the payment of special dividends, transactions with affiliates, asset sales, acquisitions, mergers and consolidations, liens and encumbrances, and prepayments of certain other indebtedness.

The restrictive covenants included in the Credit Agreement are subject to amendments executed periodically. The most recent amendment that impacted the restrictive covenants contained in the Credit Agreement is Amendment No. 7.

Under the terms of the Credit Agreement, TransDigm is entitled, on one or more occasions, to request additional term loans or additional revolving commitments to the extent that the existing or new lenders agree to provide such incremental term loans or additional revolving commitments provided that, among other conditions, our consolidated net leverage ratio would be no greater than 7.25x and the consolidated secured net debt ratio would be no greater than 5.00x, in each case, after giving effect to such incremental term loans or additional revolving commitments.

If any such default occurs, the lenders under the Credit Agreement and the holders of the Notes and Secured Notes may elect to declare all outstanding borrowings, together with accrued interest and other amounts payable thereunder, to be immediately due and payable. The lenders under the Credit Agreement also have the right in these circumstances to terminate any commitments they have to provide further borrowings. In addition, following an event of default under the Credit Agreement, the lenders thereunder and the holders of the Secured Notes will have the right to proceed against the collateral granted to them to secure the debt, which includes our available cash, and they will also have the right to prevent us from making debt service payments on the Notes.

With the exception of the revolving credit facility, the Company has no maintenance covenants in its existing term loan and indenture agreements. Under the Credit Agreement, if the usage of the revolving credit facility exceeds 35%, or \$284 million, of the total revolving commitments, the Company is required to maintain a maximum consolidated net leverage ratio of net debt to trailing four-quarter EBITDA As Defined of 7.25x as of the last day of the fiscal quarter.

As of September 30, 2022, the Company was in compliance with all of its debt covenants and expects to remain in compliance with its debt covenants in subsequent periods.

Trade Receivable Securitization Facility

During fiscal 2014, the Company established a trade receivable securitization facility (the "Securitization Facility"). The Securitization Facility effectively increases the Company's borrowing capacity depending on the amount of the domestic operations' trade accounts receivable. The Securitization Facility includes the right for the Company to exercise annual one year extensions as long as there have been no termination events as defined by the agreement. The Company uses the proceeds from the Securitization Facility as an alternative to other forms of debt, effectively reducing borrowing costs.

On July 25, 2022, the Company amended the Securitization Facility to, among other things, extend the maturity date to July 25, 2023 and bear interest at a rate of SOFR plus 1.30%, compared to an interest rate of LIBOR plus 1.20% that applied prior to the amendment. The Securitization Facility is collateralized by substantially all of the Company's domestic operations' trade accounts receivable. As of September 30, 2022, the Company has borrowed \$350 million under the Securitization Facility, which is fully drawn. At September 30, 2022, the applicable interest rate was 3.84%.

Dividend and Dividend Equivalent Payments

On August 26, 2022, the Company paid a special cash dividend of \$18.50 on each outstanding share of common stock. No dividends were declared or paid during fiscal 2021. In fiscal 2022, the Company paid approximately \$86 million in dividend equivalent payments. Total cash payments related to the special dividend and dividend equivalent payments in fiscal 2022 and 2021 were approximately \$1,091 million and \$73 million, respectively. Refer to Note 18, "Stock-Based Compensation," in the notes to the consolidated financial statements herein for further information on the Company's dividend equivalent payments.

Any future declaration of special cash dividends on our common stock will be at the discretion of our Board of Directors and will depend upon our results of operations, earnings, capital requirements, financial condition, future prospects, contractual restrictions under the Credit Agreement and Indentures, the availability of surplus under Delaware law and other factors deemed relevant by our Board of Directors. TD Group is a holding company and conducts all of its operations through direct and indirect subsidiaries. Unless TD Group receives dividends, distributions, advances, transfers of funds or other payments from our subsidiaries, TD Group will be unable to pay any dividends on our common stock in the future. The ability of any subsidiaries to take any of the foregoing actions is limited by the terms of our Term Loans Facility and Indentures and may be limited by future debt or other agreements that we may enter into.

Contractual Obligations and Commitments

The following table summarizes the Company's cash requirements from all significant contractual obligations as of September 30, 2022 (in millions):

	Total Contractual Obligations	Payment Due by Period			
		Less than 1 Year	Between 1-3 Years	Between 3-5 Years	Over 5 Years
Senior subordinated and secured notes ⁽¹⁾	\$ 12,100	\$ —	\$ —	\$ 7,500	\$ 4,600
Term Loans Facility ⁽²⁾	7,298	75	3,910	3,313	—
Scheduled interest payments ⁽³⁾	4,273	1,177	2,126	780	190
Pension funding minimums ⁽⁴⁾	127	12	24	25	66
Securitization Facility	350	350	—	—	—
Finance leases	294	12	26	26	230
Operating leases	113	21	34	23	35
Total contractual cash obligations	<u>\$ 24,555</u>	<u>\$ 1,647</u>	<u>\$ 6,120</u>	<u>\$ 11,667</u>	<u>\$ 5,121</u>

⁽¹⁾ Represents principal maturities which excludes interest, debt issuance costs, original issue discount and premiums.

⁽²⁾ The Tranche G term loans mature in August 2024, the Tranche E term loans mature in May 2025 and the Tranche F term loans mature in December 2025. The Term Loans Facility requires quarterly aggregate principal payments of \$19 million.

⁽³⁾ Assumes that the variable interest rate on our Tranche E, Tranche F and Tranche G term loans under our Term Loans Facility range from approximately 5.82% to 7.21% based on anticipated movements in the LIBOR, which given the ongoing volatility in rates, are highly uncertain. In addition, interest payments include the impact of the existing interest rate swap and cap agreements described in Note 21, "Derivatives and Hedging Activities," in the notes to the consolidated financial statements included herein.

⁽⁴⁾ Represents future benefit payments expected to be paid from the pension and post-retirement benefit plans or from the Company's assets.

Off-Balance Sheet Arrangements

The Company utilizes letters of credit to back certain payment and performance obligations. Letters of credit are subject to limits based on amounts outstanding under the Company's revolving credit facility. As of September 30, 2022, the Company had \$31 million in letters of credit outstanding.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in conformity with U.S. GAAP, which often requires the judgment of management in the selection and application of certain accounting principles and methods. Management believes that the quality and reasonableness of our most critical policies enable the fair presentation of our financial position and results of operations. However, investors are cautioned that the sensitivity of financial statements to these methods, assumptions and estimates could create materially different results under different conditions or using different assumptions.

Below are those policies applied in preparing our financial statements that management believes are the most dependent on the application of estimates and assumptions. For additional significant accounting policies, see Note 3, “Summary of Significant Accounting Policies,” in the notes to the consolidated financial statements included herein.

Revenue Recognition – Revenue is recognized from the sale of products when control transfers to the customer, which is demonstrated by our right to payment, a transfer of title, a transfer of the risk and rewards of ownership, or the customer acceptance, but most frequently upon shipment where the customer obtains physical possession of the goods. The majority of the Company’s revenue is recorded at a point in time. Sales recognized over time are generally accounted for using an input measure to determine progress completed at the end of the period. Sales for service contracts generally are recognized as the services are provided. For agreements with multiple performance obligations, judgment is required to determine whether performance obligations specified in these agreements are distinct and should be accounted for as separate revenue transactions for recognition purposes based on the standalone selling price of each performance obligation. The primary method used to estimate a standalone selling price is the price observed in standalone sales to customers for the same product or service. We consider the contractual consideration payable by the customer and assesses variable consideration that may affect the total transaction price. Variable consideration is included in the estimated transaction price when there is a basis to reasonably estimate the amount, including whether the estimate should be constrained in order to avoid a significant reversal of revenue in a future period. These estimates are based on historical experience, anticipated performance under the terms of the contract and our best judgment at the time.

Inventories – Inventories are stated at the lower of cost or net realizable value. Cost of inventories is generally determined by the average cost and the first-in, first-out (“FIFO”) methods and includes material, labor and overhead related to the manufacturing process. Because the Company sells products that are installed on airframes that can be in-service for 25 or more years, it must keep a supply of such products on hand while the airframes are in use. Where management estimated that the net realizable value was below cost or determined that future demand was lower than current inventory levels, based on historical experience, current and projected market demand, current and projected volume trends and other relevant current and projected factors associated with the current economic conditions, a reduction in inventory cost to estimated net realizable value was made by recording a provision included in cost of sales. Additionally, management believes that the Company’s estimates of excess and obsolete inventory are reasonable and material changes in future estimates or assumptions used to calculate our estimate is unlikely. However, actual results may differ materially from the estimates and additional provisions may be required in the future. A 10% change in our excess and obsolete inventory reserve at September 30, 2022 would not have a material impact on our results. In accordance with industry practice, all inventories are classified as current assets as all inventories are available and necessary to support current sales, even though a portion of the inventories may not be sold within one year.

Goodwill and Other Intangible Assets – In accordance with ASC 805, “Business Combinations,” the Company uses the acquisition method of accounting to allocate costs of acquired businesses to the assets acquired and liabilities assumed based on their estimated fair values at the dates of acquisition. The excess costs of acquired businesses over the fair values of the assets acquired and liabilities assumed are recognized as goodwill. The valuations of the acquired assets and liabilities will impact the determination of future operating results. Determining the fair value of assets acquired and liabilities assumed requires management’s judgment and often involves the use of significant estimates and assumptions, including assumptions with respect to future cash inflows and outflows, revenue growth rates and EBITDA margins, discount rates, customer attrition rates, royalty rates, asset lives and market multiples, among other items. We determine the fair values of intangible assets acquired generally in consultation with third-party valuation advisors. Fair value adjustments to the Company’s assets and liabilities are recognized and the results of operations of the acquired business are included in our consolidated financial statements from the effective date of the merger or acquisition.

Intangible assets other than goodwill are recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if the intangible asset can be sold, transferred, licensed or exchanged, regardless of the Company’s intent to do so. Goodwill and identifiable intangible assets are recorded at their estimated fair value on the date of acquisition and are reviewed at least annually for impairment based on cash flow projections and fair value estimates.

U.S. GAAP requires that the annual, and any interim, goodwill impairment assessment be performed at the reporting unit level. Our reporting units have been identified at the operating unit level, which is one level below our operating segments. Substantially all goodwill was determined and recognized for each reporting unit pursuant to the accounting for the merger or acquisition as of the date of each transaction. With respect to acquisitions integrated into an existing reporting unit, any acquired goodwill is combined with the goodwill of the reporting unit.

At the time of goodwill impairment testing, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, and whether it is necessary to perform the quantitative goodwill impairment test. The quantitative test is required only if the Company concludes that it is more likely than not that a reporting unit's fair value is less than its carrying amount, or if the Company elects not to perform a qualitative assessment of a reporting unit. For the quantitative test, management determines the estimated fair value through the use of a discounted cash flow valuation model incorporating discount rates commensurate with the risks involved for each reporting unit. If the calculated estimated fair value is less than the current carrying value, impairment of goodwill of the reporting unit may exist. The use of a discounted cash flow valuation model to determine estimated fair value is common practice in impairment testing. The key assumptions used in the discounted cash flow valuation model for impairment testing includes discount rates, revenue growth rates and EBITDA margins, cash flow projections and terminal value rates. Discount rates are set by using the Weighted Average Cost of Capital ("WACC") methodology. The WACC methodology considers market and industry data as well as company specific risk factors for each reporting unit in determining the appropriate discount rates to be used. The Company utilizes a third party valuation firm to assist in the determination of the WACC. The discount rate utilized for each reporting unit is indicative of the return an investor would expect to receive for investing in such a business.

Management, considering industry and company-specific historical and projected data, develops growth rates, sales projections and cash flow projections for each reporting unit. Terminal value rate determination follows a common methodology of capturing the present value of perpetual cash flow estimates beyond the last projected period assuming a constant WACC and low long-term growth rates.

Management tests indefinite-lived intangible assets for impairment at the asset level, as determined by appropriate asset valuation at the time of acquisition. The impairment test for indefinite-lived intangible assets consists of a comparison between the estimated fair values and carrying values. If the carrying amounts of intangible assets that have indefinite useful lives exceed their estimated fair values, an impairment loss will be recognized in an amount equal to the difference. Management utilizes the royalty savings valuation method to determine the estimated fair value for each indefinite-lived intangible asset. In this method, management estimates the royalty savings arising from the ownership of the intangible asset. The key assumptions used in estimating the royalty savings for impairment testing include discount rates, royalty rates, growth rates, sales projections and terminal value rates. Discount rates used are similar to the rates developed by the WACC methodology considering any differences in company-specific risk factors between reporting units and the indefinite-lived intangible assets. Royalty rates are established by management with the advice of valuation experts. Management, considering industry and company-specific historical and projected data, develops growth rates and sales projections for each significant intangible asset. Terminal value rate determination follows common methodology of capturing the present value of perpetual sales estimates beyond the last projected period assuming a constant WACC and low long-term growth rates.

The discounted cash flow and royalty savings valuation methodologies require management to make certain assumptions based upon information available at the time the valuations are performed. Actual results could differ from these assumptions. Management believes the assumptions used are reflective of what a market participant would have used in calculating fair value considering the current economic conditions.

The Company had 47 reporting units with goodwill and 44 reporting units with indefinite-lived intangible assets as of the first day of the fourth quarter of fiscal 2022, the date of the annual impairment test. Based on its initial qualitative assessment over each of the reporting units, the Company identified 13 reporting units to test for impairment using a quantitative test for both goodwill and indefinite-lived intangible assets. The 13 reporting units selected for quantitative testing have higher commercial aerospace content and, as a result, have been more adversely impacted by the COVID-19 pandemic. The estimated fair values of each of these reporting units and other indefinite-lived intangible assets were in excess of their respective carrying values. The Company performed a sensitivity analysis on certain company-specific projected data, specifically earnings before taxes and net sales, which are significant assumptions in the discounted cash flow valuation model to determine estimated fair value. With a ten percentage point decrease in earnings before taxes and net sales data, all of the reporting units would continue to have fair values in excess of their respective carrying values of goodwill and other indefinite-lived intangible assets.

Stock-Based Compensation – The cost of the Company's stock-based compensation is recorded in accordance with ASC 718, "Stock Compensation." The Company uses a Black-Scholes pricing model to estimate the grant-date fair value of the stock options awarded. The Black-Scholes pricing model requires assumptions regarding the expected volatility of the Company's common shares, the risk-free interest rate, the expected life of the stock options award and the Company's dividend yield. The Company primarily utilizes historical data in determining the assumptions. An increase or decrease in the assumptions or economic events outside of management's control could, and do, have an impact on the Black-Scholes pricing model. The Company estimates stock option forfeitures based on historical data. The total number of stock options expected to vest is adjusted by actual and estimated forfeitures. Changes to the actual and estimated forfeitures will result in a cumulative adjustment in the period of change. The Company also evaluates any subsequent changes to the respective option holders terms under the modification rules of ASC 718. If determined to be a modification, the Black-Scholes pricing model is updated as of the date of the modification resulting in a cumulative catch-up to expense.

Income Taxes – The Company estimates income taxes in each jurisdiction in which it operates. This involves estimating taxable earnings, specific taxable and deductible items, the likelihood of generating sufficient future taxable income to utilize deferred tax assets and possible exposures related to future tax audits. To the extent these estimates change, adjustments to deferred and accrued income taxes are made in the period in which the changes occur. Historically, such adjustments have not been significant.

New Accounting Standards

For information about new accounting standards, see Note 4, “Recent Accounting Pronouncements,” in the notes to the consolidated financial statements included herein.

Non-GAAP Financial Measures

We present below certain financial information based on our EBITDA and EBITDA As Defined. References to “EBITDA” mean earnings before interest, taxes, depreciation and amortization, and references to “EBITDA As Defined” mean EBITDA plus, as applicable for each relevant period, certain adjustments as set forth in the reconciliations of income from continuing operations to EBITDA and EBITDA As Defined and the reconciliations of net cash provided by operating activities to EBITDA and EBITDA As Defined presented below.

Neither EBITDA nor EBITDA As Defined is a measurement of financial performance under U.S. GAAP. We present EBITDA and EBITDA As Defined because we believe they are useful indicators for evaluating operating performance and liquidity.

Our management believes that EBITDA and EBITDA As Defined are useful as indicators of liquidity because securities analysts, investors, rating agencies and others use EBITDA to evaluate a company’s ability to incur and service debt. In addition, EBITDA As Defined is useful to investors because the revolving credit facility under our senior secured credit facility requires compliance under certain circumstances, on a pro forma basis, with a financial covenant that measures the ratio of the amount of our secured indebtedness to the amount of our Consolidated EBITDA defined in the same manner as we define EBITDA As Defined herein.

In addition to the above, our management uses EBITDA As Defined to review and assess the performance of the management team in connection with employee incentive programs and to prepare its annual budget and financial projections. Moreover, our management uses EBITDA As Defined to evaluate acquisitions.

Although we use EBITDA and EBITDA As Defined as measures to assess the performance of our business and for the other purposes set forth above, the use of these non-GAAP financial measures as analytical tools has limitations, and you should not consider any of them in isolation, or as a substitute for analysis of our results of operations as reported in accordance with U.S. GAAP. Some of these limitations are:

- neither EBITDA nor EBITDA As Defined reflects the significant interest expense, or the cash requirements, necessary to service interest payments on our indebtedness;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often have to be replaced in the future, and neither EBITDA nor EBITDA As Defined reflects any cash requirements for such replacements;
- the omission of the substantial amortization expense associated with our intangible assets further limits the usefulness of EBITDA and EBITDA As Defined;
- neither EBITDA nor EBITDA As Defined includes the payment of taxes, which is a necessary element of our operations; and
- EBITDA As Defined excludes the cash expense we have incurred to integrate acquired businesses into our operations, which is a necessary element of certain of our acquisitions.

Because of these limitations, EBITDA and EBITDA As Defined should not be considered as measures of discretionary cash available to us to invest in the growth of our business. Management compensates for these limitations by not viewing EBITDA or EBITDA As Defined in isolation and specifically by using other U.S. GAAP measures, such as net income, net sales and operating profit, to measure our operating performance. Neither EBITDA nor EBITDA As Defined is a measurement of financial performance under U.S. GAAP, and neither should be considered as an alternative to net income or cash flow from operations determined in accordance with U.S. GAAP. Our calculation of EBITDA and EBITDA As Defined may not be comparable to the calculation of similarly titled measures reported by other companies.

The following table sets forth a reconciliation of income from continuing operations to EBITDA and EBITDA As Defined (in millions):

	Fiscal Years Ended September 30,	
	2022	2021
Income from continuing operations	\$ 866	\$ 681
Adjustments:		
Depreciation and amortization expense	253	253
Interest expense, net	1,076	1,059
Income tax provision	261	34
EBITDA	2,456	2,027
Adjustments:		
Inventory acquisition accounting adjustments ⁽¹⁾	3	6
Acquisition integration costs ⁽²⁾	11	14
Acquisition and divestiture transaction-related expenses ⁽³⁾	4	15
Non-cash stock and deferred compensation expense ⁽⁴⁾	184	130
Refinancing costs ⁽⁵⁾	1	37
COVID-19 pandemic restructuring costs ⁽⁶⁾	—	40
Gain on sale of businesses, net ⁽⁷⁾	(7)	(69)
Other, net ⁽⁸⁾	(6)	(11)
EBITDA As Defined	\$ 2,646	\$ 2,189

⁽¹⁾ Represents accounting adjustments to inventory associated with acquisitions of businesses and product lines that were charged to cost of sales when inventory was sold.

⁽²⁾ Represents costs incurred to integrate acquired businesses and product lines into TD Group's operations, facility relocation costs and other acquisition-related costs.

⁽³⁾ Represents transaction-related costs for both acquisitions and divestitures comprising deal fees, legal, financial and tax due diligence expenses, and valuation costs that are required to be expensed as incurred.

⁽⁴⁾ Represents the compensation expense recognized by TD Group under our stock incentive plans and deferred compensation plans.

⁽⁵⁾ Represents costs expensed related to debt financing activities, including new issuances, extinguishments, refinancings and amendments to existing agreements.

⁽⁶⁾ Represents restructuring costs related to the Company's cost reduction measures in response to the COVID-19 pandemic of \$36 million for the fiscal year ended September 30, 2021. These are costs related to the Company's actions to reduce its workforce and consolidate certain facilities to align with customer demand. This also includes \$4 million for the fiscal year ended September 30, 2021 of incremental costs related to the pandemic that are not expected to recur once the pandemic has subsided and are clearly separable from normal operations (e.g., additional cleaning and disinfecting of facilities by contractors above and beyond normal requirements, personal protective equipment, etc.). Restructuring costs incurred in response to the COVID-19 pandemic for the fiscal year ended September 30, 2022 were not material.

⁽⁷⁾ Represents the net gain on sale of businesses. Refer to Note 2, "Acquisitions and Divestitures," in the notes to the consolidated financial statements included herein for further information.

⁽⁸⁾ Primarily represents foreign currency transaction gain or loss, payroll withholding taxes related to special dividend and dividend equivalent payments and stock option exercises, non-service related pension costs, including the pension settlement charge for the Esterline Retirement Plan (further detailed in Note 15, "Retirement Plans") and gain or loss on sale of fixed assets.

The following table sets forth a reconciliation of net cash provided by operating activities to EBITDA and EBITDA As Defined (in millions):

	Fiscal Years Ended September 30,	
	2022	2021
Net cash provided by operating activities	\$ 948	\$ 913
Adjustments:		
Changes in assets and liabilities, net of effects from acquisitions and sales of businesses	288	98
Interest expense, net ⁽¹⁾	1,076	1,059
Income tax provision - current	283	—
Loss contract amortization	39	55
Non-cash stock and deferred compensation expense ⁽²⁾	(184)	(130)
Refinancing costs ⁽³⁾	(1)	(37)
Gain on sale of businesses, net ⁽⁴⁾	7	69
EBITDA	2,456	2,027
Adjustments:		
Inventory acquisition accounting adjustments ⁽⁵⁾	3	6
Acquisition integration costs ⁽⁶⁾	11	14
Acquisition and divestiture transaction-related expenses ⁽⁷⁾	4	15
Non-cash stock and deferred compensation expense ⁽²⁾	184	130
Refinancing costs ⁽³⁾	1	37
COVID-19 pandemic restructuring costs ⁽⁸⁾	—	40
Gain on sale of businesses, net ⁽⁴⁾	(7)	(69)
Other, net ⁽⁹⁾	(6)	(11)
EBITDA As Defined	\$ 2,646	\$ 2,189

(1) Represents interest expense excluding the amortization of debt issuance costs and premium and discount on debt.

(2) Represents the compensation expense recognized by TD Group under our stock incentive plans and deferred compensation plans.

(3) Represents costs expensed related to debt financing activities, including new issuances, extinguishments, refinancings and amendments to existing agreements.

(4) Represents the net gain on sale of businesses. Refer to Note 2, “Acquisitions and Divestitures,” in the notes to the consolidated financial statements included herein for further information.

(5) Represents accounting adjustments to inventory associated with acquisitions of businesses and product lines that were charged to cost of sales when inventory was sold.

(6) Represents costs incurred to integrate acquired businesses and product lines into TD Group’s operations, facility relocation costs and other acquisition-related costs.

(7) Represents transaction-related costs for both acquisitions and divestitures comprising deal fees, legal, financial and tax due diligence expenses, and valuation costs that are required to be expensed as incurred.

(8) Represents restructuring costs related to the Company's cost reduction measures in response to the COVID-19 pandemic of \$36 million for the fiscal year ended September 30, 2021. These are costs related to the Company's actions to reduce its workforce and consolidate certain facilities to align with customer demand. This also includes \$4 million for the fiscal year ended September 30, 2021 of incremental costs related to the pandemic that are not expected to recur once the pandemic has subsided and are clearly separable from normal operations (e.g., additional cleaning and disinfecting of facilities by contractors above and beyond normal requirements, personal protective equipment, etc.). Restructuring costs incurred in response to the COVID-19 pandemic for the fiscal year ended September 30, 2022 were not material.

(9) Primarily represents foreign currency transaction gain or loss, payroll withholding taxes related to special dividend and dividend equivalent payments and stock option exercises, non-service related pension costs, including the pension settlement charge for the Esterline Retirement Plan (further detailed in Note 15, “Retirement Plans”) and gain or loss on sale of fixed assets.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our main exposure to market risk relates to interest rates. Our financial instruments that are subject to interest rate risk is principally our variable rate debt. In July 2017, the U.K. Financial Conduct Authority (the authority that regulates LIBOR) announced that it intended to stop compelling banks to submit rates for the calculation of LIBOR after 2021. The discontinuation date for submission and publication of rates for the remaining tenors of USD LIBOR (one-month, three-month, six-month and twelve-month) was subsequently extended by the ICE Benchmark Administration (the administrator of LIBOR) until June 30, 2023. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after 2023. Similarly, it is not possible to predict whether LIBOR will continue to be viewed as an acceptable market benchmark, what rate or rates may become acceptable alternatives to LIBOR, or what effect these changes in views or alternatives may have on financial markets for LIBOR-linked financial instruments. While the U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, has chosen the secured overnight financing rate (“SOFR”) as the recommended risk-free reference rate for the U.S. (calculated based on repurchase agreements backed by treasury securities), we cannot currently predict the extent to which this index will gain widespread acceptance as a replacement for LIBOR. It is not possible to predict the effect of these changes, other reforms or the establishment of alternative reference rates.

In February 2020, in connection with Amendment No. 7 to the Credit Agreement, we amended our Credit Agreement to include a provision for the determination of an alternative reference interest rate. Additionally, with respect to our derivatives portfolio, we have elected the LIBOR protocols issued by the International Swaps and Derivatives Association, but the discontinuation of LIBOR may also require our derivative agreements to be amended in some way. Once the alternative interest rate has replaced LIBOR, our future interest expense could be impacted. We will continue to evaluate the risks and opportunities related to LIBOR transition.

At September 30, 2022, we had borrowings under our Term Loans Facility, which consists of three tranches of term loans, of approximately \$7,298 million that were subject to interest rate risk. Borrowings under our term loans bear interest, at our option, at a rate equal to either an alternate base rate or an adjusted LIBOR for a one-, two-, three- or six-month (or to the extent available to each lender, nine- or twelve-month) interest period chosen by us, in each case, plus an applicable margin percentage. Accordingly, the Company’s cash flows and earnings will be exposed to the market risk of interest rate changes resulting from variable rate borrowings under our term loans. The Company’s objective is to maintain an allocation of at least 75% fixed rate and 25% variable rate debt thereby limiting its exposure to changes in near-term interest rates. Interest rate swaps and caps used to hedge and offset, respectively, the variable interest rates on the credit facility are described in Note 21, “Derivatives and Hedging Activities,” in the notes to the consolidated financial statements included herein. We do not hold or issue derivative instruments for speculative purposes. As of September 30, 2022, approximately 85% of our total debt was fixed rate. The effect of a hypothetical one percentage point increase in interest rates would increase the annual interest costs under our term loans by approximately \$74 million based on the amount of outstanding borrowings at September 30, 2022. The weighted average interest rate on the \$7,298 million of borrowings under our Term Loans Facility on September 30, 2022 was 6.3%.

For information about the fair value of the aggregate principal amount of borrowings under our term loans and the fair value of the Notes, refer to Note 20, “Fair Value Measurements,” in the notes to the consolidated financial statements included herein.

Foreign Currency Risk

Certain of our foreign subsidiaries’ sales and results of operations are subject to the impact of foreign currency fluctuations, primarily the British pound and the euro. Because our consolidated financial statements are presented in U.S. dollars, increases or decreases in the value of the U.S. dollar relative to other currencies in which we transact business could materially adversely affect our net sales, net income and the carrying values of our assets located outside the U.S. global economic uncertainty continues to exist. Strengthening of the U.S. dollar relative to other currencies may adversely affect our operating results. Foreign currency forward exchange contracts provide for the purchase or sale of foreign currencies at specified future dates at specified exchange rates, and are used to offset changes in the fair value of certain assets or liabilities or forecasted cash flows resulting from transactions denominated in foreign currencies. The foreign currency forward exchange contracts entered into by the Company are described in Note 21, “Derivatives and Hedging Activities,” in the notes to the consolidated financial statements included herein.

A 10% change in foreign currency exchange rates would not have resulted in a material impact to net income for the fiscal year ended September 30, 2022.

As disclosed elsewhere in this report, the future impacts of the Russia and Ukraine conflict and the COVID-19 pandemic and their residual effects, including economic uncertainty, inflationary environment and disruption within the global supply chain, labor markets and aerospace industry, on our business remain uncertain. As we cannot anticipate the ultimate duration or scope of the Russia-Ukraine war and the COVID-19 pandemic, the ultimate financial impact to our results cannot be reasonably estimated, but could be material.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item is contained on pages [F-1](#) through [F-45](#) of this Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of September 30, 2022, TD Group carried out an evaluation, under the supervision and with the participation of TD Group's management, including its President, Chief Executive Officer and Director (Principal Executive Officer) and Executive Vice President and Chief Financial Officer (Principal Financial Officer), of the effectiveness of the design and operation of TD Group's disclosure controls and procedures. Based upon that evaluation, the President, Chief Executive Officer and Director and Executive Vice President and Chief Financial Officer concluded that TD Group's disclosure controls and procedures are effective to ensure that information required to be disclosed by TD Group in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified by the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to TD Group's management, including its President, Chief Executive Officer and Director and Executive Vice President and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, TD Group's management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily was required to apply its judgment in designing and evaluating the controls and procedures.

Management's Report on Internal Control Over Financial Reporting

The management of TD Group is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Exchange Act Rule 13a-15(f). Using criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) in Internal Control-Integrated Framework, TransDigm's management assessed the effectiveness of the Company's internal control over financial reporting as of September 30, 2022. Based on our assessment, management concluded that the Company's internal control over financial reporting was effective as of September 30, 2022.

During the third quarter of fiscal 2022, the Company completed the acquisition of DART. The Company is currently integrating the acquisition into its operations, compliance programs and internal control processes. As permitted by SEC rules and regulations, the Company has excluded the acquisition from management's evaluation of internal controls over financial reporting as of September 30, 2022. The acquisition constituted approximately 2% of the Company's total assets (inclusive of acquired intangible assets) as of September 30, 2022 and approximately 1% and 0% of the Company's net sales and income from continuing operations before income taxes, respectively, for the fiscal year ended September 30, 2022.

The effectiveness of the Company's internal control over financial reporting as of September 30, 2022 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report, which is included elsewhere in this Annual Report on Form 10-K and is incorporated herein by reference.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Company's internal control over financial reporting that occurred during the fourth quarter of fiscal 2022 that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
TransDigm Group Incorporated

Opinion on Internal Control over Financial Reporting

We have audited TransDigm Group Incorporated's internal control over financial reporting as of September 30, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). In our opinion, TransDigm Group Incorporated (the "Company") maintained, in all material respects, effective internal control over financial reporting as of September 30, 2022, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of DART Aerospace ("DART"), which is included in the 2022 consolidated financial statements of the Company and constituted 2% of total assets as of September 30, 2022 and 1% and 0% of net sales and income from continuing operations before income taxes, respectively, for the fiscal year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of DART.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of September 30, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in stockholders' deficit and cash flows for each of the three fiscal years in the period ended September 30, 2022, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated November 10, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Cleveland, Ohio
November 10, 2022

ITEM 9B. OTHER INFORMATION

None.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE****Directors and Executive Officers**

Information regarding TD Group's directors will be set forth under the caption "Proposal No. 1 - Election of Directors" in our Proxy Statement, which is incorporated herein by reference. The following table sets forth certain information concerning TD Group's executive officers:

Name	Age	Position
Kevin Stein	56	President, Chief Executive Officer and Director
Jorge L. Valladares III	48	Chief Operating Officer
Michael Lisman	40	Executive Vice President and Chief Financial Officer
Sarah Wynne	48	Chief Accounting Officer
Halle Martin	54	General Counsel, Chief Compliance Officer & Secretary

Mr. Stein was appointed President, Chief Executive Officer and Director in April 2018. Prior to that, Mr. Stein served as President and Chief Operating Officer from January 2017 through March 2018 and Chief Operating Officer—Power and Control from October 2014 to December 2016. Prior to joining TransDigm, Mr. Stein served as Executive Vice President and President of the Structural division of Precision Castparts Corp. from November 2011 to October 2014 and Executive Vice President and President of the Fasteners division of Precision Castparts Corp. from January 2009 through November 2011.

Mr. Valladares was appointed Chief Operating Officer in April 2019. Prior to that, Mr. Valladares served as Chief Operating Officer — Power & Control from June 2018 to March 2019, Executive Vice President from October 2013 to May 2018, as President of AvtechTye, Inc. (formerly Avtech Corporation), a wholly-owned subsidiary of TransDigm Inc., from August 2009 to September 2013, and as President of AdelWiggins Group, a division of TransDigm Inc., from April 2008 to July 2009.

Mr. Lisman was appointed Chief Financial Officer in July 2018 and Executive Vice President in January 2022. Prior to that, Mr. Lisman served as Vice President—Mergers and Acquisitions from January 2018 through June 2018, Business Unit Manager for the Air & Fuel Valves business unit at Aero Fluid Products, a wholly-owned subsidiary of TransDigm Inc., from January 2017 to January 2018 and Director of Mergers and Acquisitions of TransDigm from November 2015 to January 2017.

Ms. Wynne was appointed Chief Accounting Officer in November 2018. Prior to that, Ms. Wynne served as Group Controller from April 2015 to October 2018, as Controller of the Aero Fluid Products division of AeroControlex Group, Inc., a wholly-owned subsidiary of TransDigm Inc., from October 2009 to March 2015, and previously in other accounting roles within the Company.

Ms. Martin was appointed General Counsel and Chief Compliance Officer in March 2012 and Secretary in May 2015. Prior to that, Ms. Martin was a partner at BakerHostetler LLP.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics, which applies to all of our directors, officers, and employees and a Code of Ethics for Senior Financial Officers which includes additional ethical obligations for our senior financial management (which includes our president, chief executive officer and director, chief operating officer, executive vice president and chief financial officer, chief accounting officer, treasurer, vice president of finance, director of internal audit, general counsel, operating unit presidents and operating unit vice presidents of finance). Please refer to the information set forth in our Proxy Statement, which is incorporated herein by reference. Our Code of Business Conduct and Ethics and our Code of Ethics for Senior Financial Officers is available on our website at www.transdigm.com. Any person may receive a copy without charge by writing to us at TransDigm Group Incorporated, 1301 East 9th Street, Suite 3000, Cleveland, Ohio 44114. We intend to disclose on our website any amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics that applies to directors and executive officers and that is required to be disclosed pursuant to the rules of the Securities and Exchange Commission.

Nominations of Directors

The procedure by which stockholders may recommend nominees to our Board of Directors will be set forth under the caption "Stockholder Proposals for 2024 Annual Meeting" in our Proxy Statement, which is incorporated herein by reference.

Audit Committee

The information regarding the audit committee of our Board of Directors and audit committee financial experts will be set forth under the caption "Corporate Governance" in our Proxy Statement, which is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be set forth under the captions “Executive Compensation” and “Director Compensation” in our Proxy Statement, which is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information regarding security ownership of certain beneficial owners and management will be set forth under the caption “Security Ownership of Certain Beneficial Owners and Management” in our Proxy Statement, which is incorporated herein by reference.

Equity Compensation Plan Information

Plan category	Number of Securities to Be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders ⁽¹⁾	5,385,691 ⁽²⁾	\$ 377.99	4,346,451 ⁽³⁾

⁽¹⁾ Includes information related to the 2006 stock incentive plan and the 2014 stock option plan.

⁽²⁾ This amount represents 1,082,985 and 4,302,706 shares subject to outstanding stock options under our 2006 stock incentive plan and 2014 stock option plan, respectively. No further grants may be made under our 2006 stock incentive plan, although outstanding stock options continue in force in accordance with their terms.

⁽³⁾ This amount represents remaining shares available for award under our 2014 stock option plan and 2019 stock option plan. In August 2019, the 2019 stock option plan was adopted by the Board of Directors of TD Group and was subsequently approved by stockholders on October 3, 2019. The 2019 stock option plan permits TD Group to award stock options to our key employees, directors or consultants. The total number shares of TD Group common stock reserved for issuance or delivery under the 2019 stock option plan is 4,000,000, subject to adjustment in the event of any stock dividend or split, reorganization, recapitalization, merger, share exchange or any other similar corporate transaction or event. No grants have been made under TD Group’s 2019 stock option plan as of September 30, 2022.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be set forth under the captions entitled “Corporate Governance” and “Director Compensation” in our Proxy Statement, which is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will be set forth under the caption “Proposal No. 2 - Ratification of Appointment of Independent Registered Public Accounting Firm,” in our Proxy Statement, which is incorporated herein by reference.

PART IV

15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents Filed with Report

(a) (1) Financial Statements

	Page
Report of Independent Registered Public Accounting Firm (Ernst & Young LLP, PCAOB ID: 42)	F-1
Consolidated Balance Sheets as of September 30, 2022 and 2021	F-3
Consolidated Statements of Income for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-4
Consolidated Statements of Comprehensive Income for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-5
Consolidated Statements of Changes in Stockholders' Deficit for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-6
Consolidated Statements of Cash Flows for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-7
Notes to Consolidated Financial Statements for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-8 to F-44

(a) (2) Financial Statement Schedules

Valuation and Qualifying Accounts for the Fiscal Years Ended September 30, 2022, 2021 and 2020	F-45
--	----------------------

(a) (3) Exhibits

Exhibit No.	Description	Filed Herewith or Incorporated by Reference From
3.1	Second Amended and Restated Certificate of Incorporation, filed April 28, 2014, of TransDigm Group Incorporated	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 28, 2014 (File No. 001-32833)
3.2	Third Amended and Restated Bylaws of TransDigm Group Incorporated	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed January 30, 2018 (File No. 001-32833)
3.3	Certificate of Incorporation, filed July 2, 1993, of NovaDigm Acquisition, Inc. (now known as TransDigm Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.4	Certificate of Amendment, filed July 22, 1993, of the Certificate of Incorporation of NovaDigm Acquisition, Inc. (now known as TransDigm Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.5	Bylaws of NovaDigm Acquisition, Inc. (now known as TransDigm Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.6	Certificate of Incorporation, filed July 10, 2009, of Acme Aerospace, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 5, 2009 (File No. 001-32833)
3.7	By-laws of Acme Aerospace, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 5, 2009 (File No. 001-32833)
3.8	Articles of Incorporation, filed July 30, 1986, of ARP Acquisition Corporation (now known as Adams Rite Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed April 23, 1999 (File No. 333-71397)
3.9	Certificate of Amendment, filed September 12, 1986, of the Articles of Incorporation of ARP Acquisition Corporation (now known as Adams Rite Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed April 23, 1999 (File No. 333-71397)
3.10	Certificate of Amendment, filed January 27, 1992, of the Articles of Incorporation of Adams Rite Products, Inc. (now known as Adams Rite Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed April 23, 1999 (File No. 333-71397)
3.11	Certificate of Amendment, filed December 31, 1992, of the Articles of Incorporation of Adams Rite Products, Inc. (now known as Adams Rite Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed April 23, 1999 (File No. 333-71397)
3.12	Certificate of Amendment, filed August 11, 1997, of the Articles of Incorporation of Adams Rite Sabre International, Inc. (now known as Adams Rite Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed April 23, 1999 (File No. 333-71397)
3.13	Amended and Restated Bylaws of Adams Rite Aerospace, Inc.	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed April 23, 1999 (File No. 333-71397)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.14	Certificate of Incorporation, filed June 18, 2007, of AeroControlex Group, Inc.	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.15	By-laws of AeroControlex Group, Inc.	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.16	Certificate of Formation, filed September 25, 2013, of Aerosonic LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.17	Limited Liability Company Agreement of Aerosonic LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.18	Certificate of Incorporation, filed November 13, 2009, of Airborne Acquisition, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.19	Bylaws of Airborne Acquisition, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.20	Amended and Restated Certificate of Incorporation, filed January 25, 2010, of HDT International Holdings, Inc. (now known as Airborne Global, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.21	Certificate of Amendment of Certificate of Incorporation, filed February 24, 2010, of HDT International Holdings, Inc. (now known as Airborne Global, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.22	Certificate of Amendment of Certificate of Incorporation, filed December 10, 2013, of HDT Global, Inc. (now known as Airborne Global, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.23	Bylaws of HDT International Holdings, Inc. (now known as Airborne Global, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.24	Certificate of Incorporation, filed November 13, 2009, of Airborne Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.25	Bylaws of Airborne Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.26	Certificate of Incorporation, filed September 1, 1995, of Wardle Storeys Inc. (now known as Airborne Systems NA Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.27	Certificate of Amendment to Certificate of Incorporation, filed May 28, 2002, of Wardle Storeys Inc. (now known as Airborne Systems NA Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.28	Bylaws of Airborne Systems NA Inc., as amended	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.29	Certificate of Incorporation, filed April 23, 2007, of Airborne Systems North America Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.30	Bylaws of Airborne Systems North America Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.31	Certificate of Incorporation, filed April 25, 1989, of Irvin Industries (Del), Inc. (now known as Airborne Systems North America of CA Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.32	Certificate of Amendment of Certificate of Incorporation, filed June 2, 1989, of Irvin Industries (Del), Inc. (now known as Airborne Systems North America of CA Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.33	Certificate of Amendment of Certificate of Incorporation, filed April 30, 1996, of Irvin Industries, Inc. (now known as Airborne Systems North America of CA Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.34	Certificate of Amendment to Certificate of Incorporation, filed April 23, 2007, of Irvin Aerospace Inc. (now known as Airborne Systems North America of CA Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.35	Bylaws of Airborne Systems North America of CA Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.36	Certificate of Incorporation, Profit, filed October 28, 1994, of Wardle Storeys (Parachutes) Inc. (now known as Airborne Systems North America of NJ Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.37	Certificate of Merger, filed February 9, 1995, of Para-Flite Inc. with and into Wardle Storeys (Parachutes) Inc. (now known as Airborne Systems North America of NJ Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.38	Certificate of Amendment to Certificate of Incorporation, filed April 23, 2007, of Para-Flite Inc. (now known as Airborne Systems North America of NJ Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.39	Certificate of Correction to Certificate of Incorporation, filed June 27, 2007, of Airborne Systems North America of NJ Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.40	Bylaws, as amended, of Airborne Systems North America of NJ Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.41	Certificate of Incorporation, filed May 8, 1985, of Am-Safe, Inc. (now known as AmSafe, Inc.)	Incorporated by reference to Form TransDigm Group Incorporated's 10-Q, filed May 9, 2012 (File No. 001-32833)
3.42	Certificate of Amendment of Certificate of Incorporation, filed May 19, 2005, of Am-Safe, Inc. (now known as AmSafe, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.43	By-Laws of Am-Safe, Inc. (now known as AmSafe, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.44	Certificate of Incorporation, filed October 16, 2007, of AmSafe Global Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.45	Second Amended and Restated By-Laws of AmSafe Global Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.46	Restated Certificate of Incorporation, filed July 10, 1967, of Arkwin Industries, Inc.	Incorporated by reference to Amendment No. 3 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed June 27, 2013 (File No. 333-186494)
3.47	Certificate of Amendment of Certificate of Incorporation, filed November 4, 1981, of Arkwin Industries, Inc.	Incorporated by reference to Amendment No. 3 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed June 27, 2013 (File No. 333-186494)
3.48	Certificate of Amendment of Certificate of Incorporation, filed June 11, 1999, of Arkwin Industries, Inc.	Incorporated by reference to Amendment No. 3 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed June 27, 2013 (File No. 333-186494)
3.49	By-laws of Arkwin Industries, Inc.	Incorporated by reference to Amendment No. 3 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed June 27, 2013 (File No. 333-186494)
3.50	Amended and Restated Certificate of Incorporation, filed February 7, 2007, of Aviation Technologies, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.51	By-laws of Wings Holdings, Inc. (now known as Aviation Technologies, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.52	Certificate of Formation, effective June 28, 2007, of Avionic Instruments LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.53	Limited Liability Company Agreement of Avionic Instruments LLC	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.54	Articles of Incorporation, filed December 29, 1992, of Avionics Specialties, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.55	Bylaws of Avionics Specialties, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.56	Articles of Incorporation, filed October 3, 1963, of Avtech Corporation (now known as AvtechTyee, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.57	Amendment to Articles of Incorporation, filed March 30, 1984, of Avtech Corporation (now known as AvtechTyee, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.58	Amendment to Articles of Incorporation, filed April 17, 1989, of Avtech Corporation (now known as AvtechTye, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.59	Articles of Amendment of Articles of Incorporation, filed July 17, 1998, of Avtech Corporation (now known as AvtechTye, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.60	Articles of Amendment to Articles of Incorporation, filed May 20, 2003, of Avtech Corporation (now known as AvtechTye, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.61	Articles of Amendment to Articles of Incorporation, filed May 2, 2012, of AvtechTye, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2012 (File No. 001-32833)
3.62	By-laws of Avtech Corporation (now known as AvtechTye, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.63	Certificate of Incorporation, filed October 24, 1977, of Transformer Technology Corporation (now known as Power Device Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.64	Certificate of Amendment of Certificate of Incorporation, filed December 1, 1977, of Transformer Technology Corporation (now known as Power Device Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.65	Certificate of Amendment of Certificate of Incorporation, filed June 20, 2022, of Beta Transformer Technology Corporation (now known as Power Device Corporation)	Filed Herewith
3.66	By-laws of Transformer Technology Corporation (now known as Power Device Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.67	Certificate of Formation, filed May 30, 2013, of Beta Transformer Technology LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.68	Amended and Restated Limited Liability Company Agreement, filed July 7, 2016, of Beta Transformer Technology LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.69	Limited Liability Company Certificate of Formation of Breeze-Eastern LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 11, 2016 (File No. 001-32833)
3.70	Limited Liability Company Agreement of Breeze-Eastern LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 11, 2016 (File No. 001-32833)
3.71	Articles of Incorporation, filed February 6, 1998, of Air Carrier Acquisition Corp. (now known as Bridport-Air Carrier, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.72	Articles of Amendment, filed February 23, 1998, of Air Carrier Acquisition Corp. (now known as Bridport-Air Carrier, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.73	Articles of Amendment, filed December 14, 1999, of Bridport-Air Carrier, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.74	Amended and Restated By-Laws of Bridport-Air Carrier, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.75	Certificate of Incorporation, filed May 9, 2000, of Erie Acquisition Corp. (now known as Bridport Erie Aviation, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.76	Certificate of Amendment of Certificate of Incorporation, filed May 30, 2000, of Erie Acquisition Corp. (now known as Bridport Erie Aviation, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.77	Certificate of Amendment of Certificate of Incorporation, filed June 19, 2000, of Bridport Erie Aviation, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.78	Amended and Restated By-Laws of Erie Acquisition Corp. (now known as Bridport Erie Aviation, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.79	Certificate of Incorporation, filed July 2, 2004, of Bridport Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.80	Amended and Restated By-Laws of Bridport Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.81	Certificate of Incorporation, filed August 6, 2007, of Bruce Aerospace Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 21, 2007 (File No. 001-32833)
3.82	By-laws of Bruce Aerospace Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 21, 2007 (File No. 001-32833)
3.83	Articles of Organization, filed June 29, 2007, of CDA InterCorp LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.84	Operating Agreement of CDA InterCorp LLC	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.85	Certificate of Formation, filed September 30, 2009, of CEF Industries, LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 24, 2009 (File No. 001-32833)
3.86	Limited Liability Company Agreement of CEF Industries, LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 24, 2009 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.87	Certificate of Formation, effective June 30, 2007, of Champion Aerospace LLC	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.88	Limited Liability Company Agreement of Champion Aerospace LLC	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.89	Certificate of Incorporation, filed October 23, 1970, of ILC Data Devices Corporation (now known as Data Device Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.90	Certificate of Amendment of Certificate of Incorporation, filed April 23, 1999, of ILC Data Device Corporation (now known as Data Device Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.91	Certificate of Amendment of Certificate of Incorporation, filed July 14, 2014, of Data Device Corporation	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.92	By-laws of ILC Data Devices Corporation (now known as Data Device Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.93	Certificate of Incorporation, filed November 20, 2009, of Dukes Aerospace, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed December 4, 2009 (File No. 001-32833)
3.94	By-laws of Dukes Aerospace, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed December 4, 2009 (File No. 001-32833)
3.95	Certificate of Formation, filed February 29, 2000, of Western Sky Industries, LLC (now known as Electromech Technologies LLC)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.96	Certificate of Amendment, filed December 18, 2013, of Western Sky Industries, LLC (now known as Electromech Technologies LLC)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
3.97	Fourth Amended and Restated Limited Liability Agreement of Electromech Technologies LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.98	Articles of Organization, as amended, of HarcoSemco LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.99	First Amended and Restated Limited Liability Company Agreement of HarcoSemco LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.100	Articles of Incorporation, filed May 10, 1957, of Hartwell Aviation Supply Company (now known as Hartwell Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.101	Certificate of Amendment, filed June 9, 1960, of Articles of Incorporation of Hartwell Aviation Supply Company (now known as Hartwell Corporation)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.102	Certification of Amendment, filed October 23, 1987, of Articles of Incorporation of Hartwell Corporation	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.103	Certificate of Amendment, filed April 9, 1997, of Articles of Incorporation of Hartwell Corporation	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.104	By-laws of Hartwell Corporation	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.105	Amended and Restated Certificate of Incorporation of ILC Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.106	By-laws, as amended, of ILC Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.107	Certificate of Formation, filed January 26, 2007, of Johnson Liverpool LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.108	Amended and Restated Limited Liability Company Agreement of Johnson Liverpool LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.109	Certificate of Incorporation, filed March 28, 1994, of MPT Acquisition Corp. (now known as MarathonNorco Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.110	Certificate of Amendment, filed May 18, 1994, of the Certificate of Incorporation of MPT Acquisition Corp. (now known as MarathonNorco Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.111	Certificate of Amendment, filed May 24, 1994, of the Certificate of Incorporation of MPT Acquisition Corp. (now known as MarathonNorco Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.112	Certificate of Amendment, filed August 28, 2003, of the Certificate of Incorporation of Marathon Power Technologies Company (now known as MarathonNorco Aerospace, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 28, 2006 (File No. 001-32833)
3.113	Bylaws of MPT Acquisition Corp. (now known as MarathonNorco Aerospace, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Holding Company's Form S-4, filed January 29, 1999 (File No. 333-71397)
3.114	Certificate of Incorporation, filed April 13, 2007, of McKechnie Aerospace DE, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.115	By-laws of McKechnie Aerospace DE, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.116	Certificate of Incorporation, filed April 25, 2007, of McKechnie Aerospace Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.117	By-laws of McKechnie Aerospace Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.118	Certificate of Formation, filed May 11, 2005, of Melrose US 3 LLC (now known as McKechnie Aerospace US LLC)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.119	Certificate of Amendment, filed May 11, 2007, to Certificate of Formation of Melrose US 3 LLC (now known as McKechnie Aerospace US LLC)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.120	Limited Liability Company Agreement of McKechnie Aerospace US LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.121	Restated Certificate of Incorporation, filed June 27, 2014, of North Hills Signal Processing Corp.	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed May 10, 2017 (File No. 333-217850)
3.122	By-laws of Porta Systems Corp. (now known as North Hills Signal Processing Corp.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed May 10, 2017 (File No. 333-217850)
3.123	Certificate of Formation, filed September 30, 2021, of North Hills Signal Processing Overseas LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
3.124	Limited Liability Company Agreement of North Hills Signal Processing Overseas LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
3.125	Certificate of Incorporation, filed April 28, 2015, of PX Acquisition Co. (now known as Pexco Aerospace, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 5, 2015 (File No. 001-32833)
3.126	Certificate of Amendment of Certificate of Incorporation, filed May 14, 2015, of PX Acquisition Co. (now known as Pexco Aerospace, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 5, 2015 (File No. 001-32833)
3.127	By-laws of PX Acquisition Co. (now known as Pexco Aerospace, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 5, 2015 (File No. 001-32833)
3.128	Articles of Incorporation, filed October 3, 1956, of PneuDraulics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2015 (File No. 001-32833)
3.129	Certificate of Amendment of Articles of Incorporation, filed December 9, 1970, of Articles of Incorporation of PneuDraulics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2015 (File No. 001-32833)
3.130	Restated By-laws of PneuDraulics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2015 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.131	Limited Liability Company Certificate of Formation, filed May 30, 2007, of Schneller LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2012 (File No. 001-32833)
3.132	Amended and Restated Limited Liability Company Agreement, dated August 31, 2011, of Schneller LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2012 (File No. 001-32833)
3.133	Certificate of Incorporation, as amended, of Semco Instruments, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed September 7, 2010 (File No. 001-32833)
3.134	Certificate of Amendment of Certificate of Incorporation, filed October 17, 2012, of Semco Instruments, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2012 (File No. 001-32833)
3.135	Amended and Restated By-laws of Semco Instruments, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed September 7, 2010 (File No. 001-32833)
3.136	Certificate of Incorporation, filed September 16, 1994, of Am-Safe Commercial Products, Inc. (now known as Shield Restraint Systems, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.137	Certificate of Amendment of Certificate of Incorporation, filed May 19, 2005, of AmSafe Commercial Products, Inc. (now known as Shield Restraint Systems, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.138	Certificate of Amendment of Certificate of Incorporation, filed August 27, 2014, of AmSafe Commercial Products, Inc. (now known as Shield Restraint Systems, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 14, 2014 (File No. 001-32833)
3.139	By-laws of Am-Safe Commercial Products, Inc. (now known as Shield Restraint Systems, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 9, 2012 (File No. 001-32833)
3.140	Certificate of Incorporation, filed December 22, 2004, of Skurka Aerospace Inc.	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed October 11, 2006 (File No. 333-137937)
3.141	By-laws, as amended, of Skurka Aerospace Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.142	Certificate of Incorporation, filed August 22, 1986, of Tactair Fluid Controls, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.143	Certificate of Amendment, filed June 8, 1998, of Certificate of Incorporation of Tactair Fluid Controls, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.144	By-Laws, as amended, of Tactair Fluid Controls, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.145	Certificate of Formation, filed March 27, 2015, of Telair International LLC (now known as Nordisk Aviation Products LLC)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 5, 2015 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.146	Amendment to Certificate of Formation, filed February 4, 2021, of Telair International LLC (now known as Nordisk Aviation Products LLC)	Filed Herewith
3.147	Limited Liability Company Agreement of Telair International LLC (now known as Nordisk Aviation Products LLC)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 5, 2015 (File No. 001-32833)
3.148	Certificate of Formation, filed February 23, 2015, of Telair US LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 5, 2015 (File No. 001-32833)
3.149	Limited Liability Company Agreement of Telair US LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 5, 2015 (File No. 001-32833)
3.150	Articles of Incorporation, filed August 6, 1999, of Texas Rotronics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 8, 2011 (File No. 001-32833)
3.151	By-laws, as amended, of Texas Rotronics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.152	Certificate of Formation, effective June 30, 2007, of Transicoil LLC	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.153	Limited Liability Company Agreement of Transicoil LLC	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed July 6, 2007 (File No. 333-144366)
3.154	Certificate of Formation, filed June 13, 2013, of Whippany Actuation Systems, LLC	Incorporated by reference to Amendment No. 3 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4/A, filed June 27, 2013 (File No. 333-186494)
3.155	Limited Liability Company Agreement of Whippany Actuation Systems, LLC	Incorporated by reference to Amendment No. 3 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4/A, filed June 27, 2013 (File No. 333-186494)
3.156	Restated Certificate of Incorporation of Young & Franklin Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 15, 2016 (File No. 001-32833)
3.157	By-laws, as amended, of Young & Franklin Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
3.158	Certificate of Incorporation, as amended, of KH Acquisition I Co. (now known as Kirkhill Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 4, 2018 (File No. 001-32833)
3.159	Amended and Restated By-laws of Kirkhill Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 4, 2018 (File No. 001-32833)
3.160	Certificate of Incorporation of TransDigm UK Holdings plc	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.161	Articles of Association of TransDigm UK Holdings plc	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.162	Articles of Organization, as amended, of Symetrics Industries, LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.163	Amended and Restated Limited Liability Company Agreement of Symetrics Industries, LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.164	Certificate of Incorporation, filed January 15, 2004, of TEAC Aerospace Technologies, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.165	Bylaws of TEAC Aerospace Technologies, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.166	Articles of Incorporation, filed January 2, 1992, of Skandia, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.167	Amended and Restated By-laws of Skandia, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
3.168	Fifth Amended and Restated Certificate of Incorporation of Esterline Technologies Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.169	Second Amended and Restated By-laws of Esterline Technologies Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.170	Certificate of Formation, filed November 13, 2007, of Esterline International Company	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.171	Amended and Restated Bylaws of Esterline International Company	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4 filed April 2, 2019 (File No. 333-228336)
3.172	Certificate of Incorporation, as amended, of Leach Holding Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.173	Amended and Restated Bylaws of Leach Holding Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.174	Certificate of Incorporation, as amended, of Leach International Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.175	Amended and Restated Bylaws of Leach International Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.176	Certificate of Incorporation of Leach Technology Group, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.177	Amended and Restated Bylaws of Leach Technology Group, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.178	Restated Articles of Incorporation of TA Aerospace Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.179	Amended and Restated Bylaws of TA Aerospace Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.180	Certificate of Formation of CMC Electronics Aurora LLC	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.181	Amended and Restated Limited Liability Company Agreement of CMC Electronics Aurora LLC	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.182	Certificate of Formation of Esterline Europe Company LLC	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.183	Amended and Restated Limited Liability Company Agreement of Esterline Europe Company LLC	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.184	Certificate of Incorporation, as amended, of Angus Electronics Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)

Exhibit No.	Description	Filed Herewith or Incorporated by Reference From
3.185	Amended and Restated Bylaws of Angus Electronics Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.186	Certificate of Incorporation, as amended, of Esterline Sensors Services Americas, Inc. (now known as Auxitrol Weston USA, Inc.)	Incorporated by reference to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed August 7, 2019 (File No. 333-233103)
3.187	Amended and Restated Bylaws of Esterline Sensors Services Americas, Inc. (now known as Auxitrol Weston USA, Inc.)	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.188	Certificate of Formation of Esterline Technologies SGIP LLC	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.189	Limited Liability Company Agreement of Esterline Technologies SGIP LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 8, 2019 (File No. 001-32833)
3.190	Certificate of Incorporation of Hytek Finishes Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.191	Amended and Restated Bylaws of Hytek Finishes Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.192	Restated Articles of Incorporation of Janco Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.193	Amended and Restated Bylaws of Janco Corporation	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.194	Certificate of Incorporation, as amended, of Mason Electric Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.195	Amended and Restated Bylaws of Mason Electric Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.196	Amended and Restated Articles of Incorporation, as amended, of NMC Group, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.197	Amended and Restated Bylaws of NMC Group, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.198	Certificate of Incorporation, as amended, of Norwich Aero Products, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.199	Amended and Restated By-laws of Norwich Aero Products, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.200	Certificate of Incorporation, as amended, of Palomar Products, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.201	Amended and Restated Bylaws of Palomar Products, Inc.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.202	Certificate of Formation of 17111 Waterview Pkwy LLC	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.203	Limited Liability Company Agreement of 17111 Waterview Pkwy LLC	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed May 8, 2019 (File No. 001-32833)
3.204	Certificate of Incorporation of Korry Electronics Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.205	Amended and Restated Bylaws of Korry Electronics Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.206	Certificate of Incorporation of Armtec Defense Products Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.207	Amended and Restated Bylaws of Armtec Defense Products Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.208	Certificate of Incorporation of Armtec Countermeasures Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.209	Amended and Restated Bylaws of Armtec Countermeasures Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.210	Certificate of Incorporation, as amended, of Armtec Countermeasures TNO Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.211	Amended and Restated Bylaws of Armtec Countermeasures TNO Co.	Incorporated by reference to Amendment No. 1 to TransDigm UK Holdings plc's, TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed April 2, 2019 (File No. 333-228336)
3.212	Certificate of Incorporation, filed August 26, 2019, of TDG ESL Holdings Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 19, 2019 (File No. 001-32833)
3.213	By-laws of TDG ESL Holdings Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 19, 2019 (File No. 001-32833)
3.214	Certificate of Incorporation, filed October 16, 2020, of Chelton Avionics Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.215	Bylaws of Chelton Avionics Holdings, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.216	Certificate of Incorporation, filed March 4, 1997, of Chelton Avionics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.217	Amended and Restated By-laws of Chelton Avionics, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.218	Certificate of Incorporation, filed August 28, 2007, of Cobham Defense Products, Inc. (now known as Chelton Defense Products, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.219	Amendment to Certificate of Incorporation, filed December 20, 2021, of Cobham Defense Products, Inc. (now known as Chelton Defense Products, Inc.)	Filed Herewith
3.220	Amended and Restated By-laws of Cobham Defense Products, Inc. (now known as Chelton Defense Products, Inc.)	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.221	Certificate of Formation, filed February 22, 2021, of Leach Mexico Holding LLC	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.222	Limited Liability Company Agreement of Leach Mexico Holding LLC	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.223	Certificate of Incorporation, as amended, of NAT Seattle Inc.	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.224	Amended and Restated By-laws of NAT Seattle Inc.	Incorporated by reference to TransDigm Group Incorporated's Form S-4, filed August 10, 2021 (File No. 333-258676)
3.225	Articles of Incorporation, filed November 13, 1995, of Apical Industries, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.226	Bylaws of Apical Industries, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.227	Articles of Incorporation of Century Helicopters, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.228	By-laws of Century Helicopters, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.229	Articles of Incorporation, filed April 11, 1997, of Dart Aerospace USA, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.230	Bylaws of Dart Aerospace USA, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.231	Certificate of Incorporation, filed February 28, 2019, of Dart Buyer, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.232	Bylaws of Dart Buyer, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.233	Certificate of Incorporation, filed July 29, 2011, of Dart Helicopter Services, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.234	Bylaws of Dart Helicopter Services, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.235	Certificate of Incorporation, filed February 28, 2019, of Dart Intermediate, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.236	Bylaws of Dart Intermediate, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.237	Second Amended and Restated Certificate of Incorporation, filed May 25, 2022, of Dart TopCo, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.238	Bylaws of Dart TopCo, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.239	Amended and Restated Articles of Incorporation, filed February 8, 2010, of Heli Tech, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.240	Amendment No. 1, filed July 12, 2010, to the Amended and Restated Articles of Incorporation of Heli Tech, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.241	Amendment No. 2, filed January 25, 2013, to the Amended and Restated Articles of Incorporation of Heli Tech, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.242	Amended and Restated By-laws of Heli Tech, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.243	Amended and Restated Articles of Incorporation, filed June 28, 2022, of Offshore Helicopter Support Services, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.244	Bylaws of Offshore Helicopter Support Services, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.245	Articles of Incorporation of Paravion Technology, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.246	By-laws of Paravion Technology, Inc.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.247	Articles of Incorporation, filed July 28, 1965, of Simplex Manufacturing Co.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.248	Articles of Amendment, filed November 9, 1973, of Simplex Manufacturing Co.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.249	Articles of Amendment, filed December 2, 1988, of Simplex Manufacturing Co.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.250	Articles of Amendment, filed August 21, 2000, of Simplex Manufacturing Co.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
3.251	Articles of Amendment, filed March 12, 2001, of Simplex Manufacturing Co.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.252	Articles of Amendment, filed October 29, 2007, of Simplex Manufacturing Co.	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
3.253	Amended and Restated By-laws of Simplex Manufacturing Co., as amended	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
4.1	Form of Stock Certificate	Incorporated by reference to Amendment No. 3 to TransDigm Group Incorporated's Form S-1 filed March 13, 2006 (File No. 333-130483)
4.2	Indenture, dated as of June 9, 2016, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to TransDigm Inc.'s 6.375% Senior Subordinated Notes due 2026	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed June 14, 2016 (File No. 001-32833)
4.3	Indenture, dated as of May 8, 2018, among TransDigm UK Holdings plc, as issuer, TransDigm Group Incorporated and TransDigm Inc., as guarantors, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to TransDigm UK Holdings plc's 6.875% Senior Subordinated Notes due 2026	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 14, 2018 (File No. 001-32833)
4.4	Indenture, dated as of February 13, 2019, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to TransDigm Inc.'s 7.50% Senior Subordinated Notes due 2027	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed February 13, 2019 (File No. 001-32833)
4.5	Indenture, dated as of February 13, 2019, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee and US collateral agent, and The Bank of New York Mellon, as UK collateral agent, relating to TransDigm Inc.'s 6.25% Senior Secured Notes due 2026	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed February 13, 2019 (File No. 001-32833)
4.6	Indenture, dated as of November 13, 2019, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to TransDigm Inc.'s 5.50% Senior Subordinated Notes due 2027	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed November 13, 2019 (File No. 001-32833)
4.7	Indenture, dated as of April 8, 2020, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee and US collateral agent, and The Bank of New York Mellon, as UK collateral agent, relating to TransDigm Inc.'s 8.00% Senior Secured Notes due 2025	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 8, 2020 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
4.8	Indenture, dated as of January 20, 2021, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto, and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to TransDigm Inc.'s 4.625% Senior Subordinated Notes due 2029	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed January 20, 2021 (File No. 001-32833)
4.9	Indenture, dated as of April 21, 2021, among TransDigm Inc., as issuer, TransDigm Group Incorporated, as a guarantor, the subsidiary guarantors party thereto, and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to TransDigm Inc.'s 4.875% Senior Subordinated Notes due 2029	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 21, 2021 (File No. 001-32833)
4.10	Form of Supplemental Indenture to Add New Guarantors	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 19, 2019 (File No. 001-32833)
4.11	Form of TransDigm Inc.'s 6.375% Senior Subordinated Notes due 2026	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed June 14, 2016 (File No. 001-32833)
4.12	Form of TransDigm UK Holdings plc's 6.875% Senior Subordinated Notes due 2026	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 14, 2018 (File No. 001-32833)
4.13	Form of TransDigm Inc.'s 7.50% Senior Subordinated Notes due 2027	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed February 13, 2019 (File No. 001-32833)
4.14	Form of TransDigm Inc.'s 6.25% Senior Secured Notes due 2026	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed February 13, 2019 (File No. 001-32833)
4.15	Form of TransDigm Inc.'s 5.50% Senior Subordinated Notes due 2027	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed November 13, 2019 (File No. 001-32833)
4.16	Form of TransDigm Inc.'s 8.00% Senior Secured Notes due 2025	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 8, 2020 (File No. 001-32833)
4.17	Form of TransDigm Inc.'s 4.625% Senior Subordinated Notes due 2029	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed January 20, 2021 (File No. 001-32833)
4.18	Form of TransDigm Inc.'s 4.875% Senior Subordinated Notes due 2029	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 21, 2021 (File No. 001-32833)
4.19	Description of Securities	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 19, 2019 (File No. 001-32833)
10.1	Fifth Amended and Restated Employment Agreement, dated April 26, 2018, between TransDigm Group Incorporated and W. Nicholas Howley*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 30, 2018 (File No. 001-32833)
10.2	Option Agreement dated August 6, 2021 between the Company and W. Nicholas Howley*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed August 10, 2021 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
10.3	Employment Agreement, dated July 27, 2018, between TransDigm Group Incorporated and Michael Lisman*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed July 30, 2018 (File No. 001-32833)
10.4	Amendment to Employment Agreement, dated November 15, 2021, between TransDigm Group Incorporated and Michael Lisman*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
10.5	Second Amended and Restated Employment Agreement, dated April 26, 2018, between TransDigm Group Incorporated and Kevin Stein*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed April 30, 2018 (File No. 001-32833)
10.6	Employment Agreement, dated October 28, 2013, between TransDigm Group Incorporated and Jorge Valladares*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed October 29, 2013 (File No. 001-32833)
10.7	Form of Amendment to Employment Agreement, dated October 2015, between TransDigm Group Incorporated and Jorge Valladares*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed October 27, 2015 (File No. 001-32833)
10.8	Second Amendment to Employment Agreement, dated July 30, 2018, between TransDigm Group Incorporated and Jorge Valladares*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed August 3, 2018 (File No. 001-32833)
10.9	Amendment to Employment Agreement, dated November 16, 2021, between TransDigm Group Incorporated and Jorge Valladares*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
10.10	Employment Agreement, dated November 10, 2018, between TransDigm Group Incorporated and Sarah Wynne*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
10.11	Amendment to Employment Agreement, dated November 15, 2021, between TransDigm Group Incorporated and Sarah Wynne*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
10.12	Employment Agreement, dated November 5, 2018, between TransDigm Group Incorporated and Halle Martin (fka Halle Terrion)*	Filed Herewith
10.13	Amendment to Employment Agreement, dated November 15, 2021, between TransDigm Group Incorporated and Halle Martin*	Filed Herewith
10.14	TransDigm Group Incorporated 2006 Stock Incentive Plan*	Incorporated by reference to Amendment No. 3 to TransDigm Group Incorporated's Form S-1, filed March 13, 2006 (File No. 333-130483)
10.15	Amendment No. 1, dated October 20, 2006, to the TransDigm Group Incorporated 2006 Stock Incentive Plan*	Incorporated by reference to Amendment No. 1 to TransDigm Inc.'s and TransDigm Group Incorporated's Form S-4, filed November 7, 2006 (File No. 333-137937)
10.16	Second Amendment to TransDigm Group Incorporated 2006 Stock Incentive Plan, dated April 25, 2008*	Incorporated by reference to TransDigm Group Incorporated's Schedule 14A, filed June 6, 2008 (File No. 001-32833)
10.17	Amended and Restated TransDigm Group Incorporated 2014 Stock Option Plan*	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 7, 2019 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
10.18	TransDigm Group Incorporated 2019 Stock Option Plan*	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed October 4, 2019 (File No. 001-32833)
10.19	TransDigm Group Incorporated 2016 Director Share Plan*	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 10, 2016 (File No. 001-32833)
10.20	Form of Stock Option Agreement for options awarded in fiscal 2018*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 9, 2018 (File No. 001-32833)
10.21	Form of Stock Option Agreement for options awarded in fiscal 2019*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 19, 2019 (File No. 001-32833)
10.22	Form of Stock Option Agreement for options awarded in fiscal 2020*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 12, 2020 (File No. 001-32833)
10.23	Form of Stock Option Agreement for options awarded in fiscal 2021*	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
10.24	Form of Stock Option Agreement for options awarded in fiscal 2022*	Filed Herewith
10.25	Fourth Amended and Restated TransDigm Group Incorporated 2006 Stock Incentive Plan Dividend Equivalent Plan*	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
10.26	Amendment to Fourth Amended and Restated TransDigm Group Incorporated 2006 Stock Incentive Plan Dividend Equivalent Plan*	Filed Herewith
10.27	Amended and Restated TransDigm Group Incorporated 2014 Stock Option Plan Dividend Equivalent Plan*	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
10.28	Amendment to Amended and Restated TransDigm Group Incorporated 2014 Stock Option Plan Dividend Equivalent Plan*	Filed Herewith
10.29	Form of Amendment to Director Options to Effect Changes in Dividend Equivalent Payment Method*	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 9, 2022 (File No. 001-32833)
10.30	Amendment and Restatement Agreement, and Second Amendment and Restated Credit Agreement, dated as of June 4, 2014, among TransDigm Inc., TransDigm Group Incorporated, the subsidiaries of TransDigm Inc. from time to time party thereto, the lenders party thereto, as lenders, and Credit Suisse AG, as administrative agent	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed June 6, 2014 (File No. 001-32833)
10.31	Incremental Assumption and Refinancing Facility Agreement, dated as of May 14, 2015, among TransDigm Inc., TransDigm Group Incorporated, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent, and the other agents and lenders named therein	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 19, 2015 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
10.32	Loan Modification Agreement, dated as of May 20, 2015, among TransDigm Inc., TransDigm Group Incorporated, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent, and the other agents and lenders party thereto	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 27, 2015 (File No. 001-32833)
10.33	Incremental Revolving Credit Assumption and Refinancing Facility Agreement, dated as of May 20, 2015, among TransDigm Inc., TransDigm Group Incorporated, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent and the other agents and lenders party thereto	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 27, 2015 (File No. 001-32833)
10.34	Incremental Term Loan Assumption Agreement dated October 14, 2016 among TransDigm Inc., TransDigm Group Incorporated, the subsidiaries of TransDigm Inc. party thereto, the lenders party thereto and Credit Suisse AG, as administrative and collateral agent	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed October 14, 2016 (File No. 001-32833)
10.35	Amendment No. 2 to the Second Amended and Restated Credit Agreement, dated as of March 6, 2017, among TransDigm Inc., as borrower, TransDigm Group Incorporated, as guarantor, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent, and the other agents and lenders named therein	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed March 8, 2017 (File No. 001-32833)
10.36	Amendment No. 3 to the Second Amended and Restated Credit Agreement, dated as of August 22, 2017, among TransDigm Inc., as borrower, TransDigm Group Incorporated, as guarantor, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent, and the other agents and lenders named therein	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed August 24, 2017 (File No. 001-32833)
10.37	Amendment No. 4 to the Second Amended and Restated Credit Agreement, dated as of November 30, 2017, among TransDigm Inc., as borrower, TransDigm Group Incorporated, as guarantor, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent, and the other agents and lenders named therein	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed December 6, 2017 (File No. 001-32833)
10.38	Refinancing Facility Agreement to the Second Amended and Restated Credit Agreement, dated as of February 22, 2018, among TransDigm Inc., as borrower, TransDigm Group Incorporated, as guarantor, the subsidiary guarantors party thereto, Credit Suisse AG, as administrative agent and collateral agent, and the other agents and lenders named therein	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed February 22, 2018 (File No. 001-32833)
10.39	Amendment No. 5, Incremental Assumption Agreement and Refinancing Facility Agreement, dated as of May 30, 2018, relating to the Second Amended and Restated Credit Agreement, dated as of June 4, 2014, among TransDigm Inc., TransDigm Group Incorporated, each subsidiary of TransDigm Inc. party thereto, the lenders party thereto, and Credit Suisse AG, as administrative agent and collateral agent for the lenders	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 31, 2018 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
10.40	Amendment No. 6 and Incremental Revolving Credit Assumption Agreement, dated as of March 14, 2019, to the Second Amended and Restated Credit Agreement, dated as of June 4, 2014, among TransDigm Inc., TransDigm Group Incorporated, each subsidiary of TransDigm Inc. party thereto, the lenders party thereto, and Credit Suisse AG, as administrative agent and collateral agent for the lenders	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed March 14, 2019 (File No. 001-32833)
10.41	Amendment No. 7 and Refinancing Facility Agreement, dated as of February 6, 2020, to the Second Amended and Restated Credit Agreement, dated as of June 4, 2014, among TransDigm Inc., TransDigm Group Incorporated, each subsidiary of TransDigm Inc. party thereto, the lenders party thereto, and Credit Suisse AG, as administrative agent and collateral agent for the lenders	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed February 6, 2020 (File No. 001-32833)
10.42	Amendment No. 8 and Loan Modification Agreement, dated as of May 24, 2021, to the Second Amended and Restated Credit Agreement, dated as of June 4, 2014, among TransDigm Inc., TransDigm Group Incorporated, each subsidiary of TransDigm Inc. party thereto, the lenders party thereto, and Credit Suisse AG, as administrative agent and collateral agent for the lenders	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed May 25, 2021 (File No. 001-32833)
10.43	Amendment No. 9 and Incremental Revolving Credit Assumption Agreement, dated as of December 29, 2021, to the Second Amended and Restated Credit Agreement, dated as of June 4, 2014, among TransDigm Inc., TransDigm Group Incorporated, each subsidiary of TransDigm Inc. party thereto, the lenders party thereto, and Credit Suisse AG, as administrative agent and collateral agent for the lenders	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed December 30, 2021 (File No. 001-32833)
10.44	Guarantee and Collateral Agreement, dated as of June 23, 2006, as amended and restated as of December 6, 2010, as further amended and restated as of February 14, 2011 and February 28, 2013, among TransDigm Inc., TransDigm Group Incorporated, the subsidiaries of TransDigm Inc. named therein and Credit Suisse AG as administrative agent and collateral agent	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed March 6, 2013 (File No. 001-32833)
10.45	Receivables Purchase Agreement, dated October 21, 2013, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association as a Purchaser and a Purchaser Agent, the various other Purchasers and Purchaser Agents from time to time party thereto, and PNC National Association as Administrator**	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed February 5, 2014 (File No. 001-32833)
10.46	First Amendment to the Receivables Purchase Agreement, dated March 25, 2014, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association as a Purchaser, Purchaser Agent for its Purchaser Group and as Administrator	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2015 (File No. 001-32833)
10.47	Second Amendment to the Receivables Purchase Agreement, dated August 8, 2014, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as a Purchaser Agent for its Purchaser Group and Administrator, and Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchase Agent for its Purchaser Group	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2015 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
10.48	Third Amendment to the Receivables Purchase Agreement, dated March 20, 2015, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as a Purchaser Agent for its Purchaser Group and Administrator, Atlantic Asset Securitization LLC, as a Conduit Purchaser, and Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchaser Agent for its and Atlantic's Purchaser Group	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2015 (File No. 001-32833)
10.49	Fourth Amendment to the Receivables Purchase Agreement dated as of August 4, 2015, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as a Purchaser Agent for its Purchaser Group and Administrator, Atlantic Asset Securitization LLC, as a Conduit Purchaser, and Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchaser Agent for its and Atlantic's Purchaser Group**	Incorporated by reference to TransDigm Group Incorporated's Form 8-K, filed August 7, 2015 (File No. 001-32833)
10.50	Ninth Amendment to the Receivables Purchase Agreement dated as of August 1, 2017, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, Atlantic Asset Securitization LLC, as a Conduit Purchaser, Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchaser Agent for its and Atlantic's Purchaser Group, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 13, 2017 (File No. 001-32833)
10.51	Tenth Amendment to the Receivables Purchase Agreement dated as of July 31, 2018, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, Atlantic Asset Securitization LLC, as a Conduit Purchaser, Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchaser Agent for its and Atlantic's Purchaser Group, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**	Incorporated by reference to TransDigm Group Incorporated's Form 10-Q, filed August 8, 2018 (File No. 001-32833)
10.52	Eleventh Amendment to the Receivables Purchase Agreement dated as of July 30, 2019, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, Atlantic Asset Securitization LLC, as a Conduit Purchaser, Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchaser Agent for its and Atlantic's Purchaser Group, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 19, 2019 (File No. 001-32833)
10.53	Twelfth Amendment to the Receivables Purchase Agreement dated as of July 22, 2020, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, Atlantic Asset Securitization LLC, as a Conduit Purchaser, Credit Agricole Corporate and Investment Bank, as a Committed Purchaser and as a Purchaser Agent for its and Atlantic's Purchaser Group, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 12, 2020 (File No. 001-32833)

<u>Exhibit No.</u>	<u>Description</u>	<u>Filed Herewith or Incorporated by Reference From</u>
10.54	Thirteenth Amendment to the Receivables Purchase Agreement dated as of July 26, 2021, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**	Incorporated by reference to TransDigm Group Incorporated's Form 10-K, filed November 16, 2021 (File No. 001-32833)
10.55	Fourteenth Amendment to the Receivables Purchase Agreement dated as of July 25, 2022, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**	Filed Herewith
21.1	Subsidiaries of TransDigm Group Incorporated	Filed Herewith
22.1	Listing of Subsidiary Guarantors	Filed Herewith
23.1	Consent of Independent Registered Public Accounting Firm	Filed Herewith
31.1	Certification by Principal Executive Officer of TransDigm Group Incorporated pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed Herewith
31.2	Certification by Principal Financial Officer of TransDigm Group Incorporated pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed Herewith
32.1	Certification by Principal Executive Officer of TransDigm Group Incorporated pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished Herewith
32.2	Certification by Principal Financial Officer of TransDigm Group Incorporated pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished Herewith
101.INS	Inline XBRL Instance Document: The XBRL Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	Filed Herewith
101.SCH	Inline XBRL Taxonomy Extension Schema	Filed Herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase	Filed Herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase	Filed Herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase	Filed Herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase	Filed Herewith
104	Cover Page Interactive Data File: the cover page XBRL tags are embedded within the Inline XBRL document and are contained within Exhibit 101	Filed Herewith

* Indicates management contract or compensatory plan contract or arrangement.

** Schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish on a supplemental basis a copy of any omitted schedule or exhibit upon request by the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized on November 10, 2022.

TRANSDIGM GROUP INCORPORATED

By: _____ /s/ Michael Lisman

Name: **Michael Lisman**Title: **Executive Vice President and Chief Financial Officer**

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the registrant and in the capacities and as of the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ /s/ Kevin Stein Kevin Stein	President, Chief Executive Officer and Director (Principal Executive Officer)	November 10, 2022
_____ /s/ Michael Lisman Michael Lisman	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	November 10, 2022
_____ /s/ Sarah Wynne Sarah Wynne	Chief Accounting Officer (Principal Accounting Officer)	November 10, 2022
_____ /s/ W. Nicholas Howley W. Nicholas Howley	Chairman	November 10, 2022
_____ /s/ David Barr David Barr	Director	November 10, 2022
_____ /s/ Jane Cronin Jane Cronin	Director	November 10, 2022
_____ /s/ Mervin Dunn Mervin Dunn	Director	November 10, 2022
_____ /s/ Michael Graff Michael Graff	Director	November 10, 2022
_____ /s/ Sean Hennessy Sean Hennessy	Director	November 10, 2022
_____ /s/ Gary E. McCullough Gary E. McCullough	Director	November 10, 2022
_____ /s/ Michele Santana Michele Santana	Director	November 10, 2022
_____ /s/ Robert Small Robert Small	Director	November 10, 2022
_____ /s/ John Staer John Staer	Director	November 10, 2022

TRANSDIGM GROUP INCORPORATED AND SUBSIDIARIES
ANNUAL REPORT ON FORM 10-K:
FISCAL YEAR ENDED SEPTEMBER 30, 2022
ITEM 8 AND ITEM 15(a) (1)
FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
INDEX

	<u>Page</u>
Financial Statements:	
Report of Independent Registered Public Accounting Firm (Ernst & Young LLP, PCAOB ID: 42)	F-1
Consolidated Balance Sheets as of September 30, 2022 and 2021	F-3
Consolidated Statements of Income for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-4
Consolidated Statements of Comprehensive Income for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-5
Consolidated Statements of Changes in Stockholders' Deficit for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-6
Consolidated Statements of Cash Flows for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-7
Notes to Consolidated Financial Statements for Fiscal Years Ended September 30, 2022, 2021 and 2020	F-8 to F-44
Supplementary Data:	
Valuation and Qualifying Accounts for the Fiscal Years Ended September 30, 2022, 2021 and 2020	F-45

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
TransDigm Group Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of TransDigm Group Incorporated (the “Company”) as of September 30, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in stockholders’ deficit and cash flows for each of the three fiscal years in the period ended September 30, 2022, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at September 30, 2022 and 2021, and the results of its operations and its cash flows for each of the three fiscal years in the period ended September 30, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of September 30, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated November 10, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of goodwill and indefinite-lived intangible assets

*Description of
the Matter*

At September 30, 2022, the Company had goodwill and indefinite-lived intangible assets of \$8.6 billion and \$990 million, respectively. As discussed in Note 3 to the consolidated financial statements, goodwill and indefinite-lived intangible assets are tested for impairment annually as of the first day of the fourth fiscal quarter, or more frequently, if an event occurs or circumstances change that would more likely than not reduce fair value below carrying value. The Company's goodwill is initially assigned to its reporting units as of the acquisition date. The Company's indefinite-lived intangible assets consist of acquired trademarks and trade names. The Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit or indefinite-lived intangible asset is less than its carrying value. If the Company determines the qualitative assessment is not sufficient to conclude on whether it is more likely than not that the fair value is less than the carrying value, a quantitative impairment test is performed. The Company performed a quantitative assessment on the goodwill and indefinite-lived intangible assets at 13 of its reporting units. As part of the quantitative assessment, the Company determines the fair value of the reporting units and indefinite-lived intangible assets using a discounted cash flow valuation model.

Auditing management's quantitative impairment assessment was complex and judgmental for certain of the 13 reporting units and their indefinite-lived intangible assets due to the significant estimation required to determine fair value. In particular, the fair value estimates were sensitive to significant assumptions, such as changes in the discount rate, revenue growth rates and EBITDA margins, which are affected by expectations about future market or economic conditions.

*How We
Addressed the
Matter in Our
Audit*

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's impairment process, including controls over management's review of the valuation model and the significant assumptions underlying the fair value determination, as described above.

To test the fair values of the Company's reporting units and indefinite-lived intangible assets, our audit procedures included, among others, assessing the use of the discounted cash flow valuation model and testing the significant assumptions discussed above and underlying data used by the Company in its analyses for certain of the 13 reporting units and their indefinite-lived intangible assets evaluated using the quantitative assessment. We utilized internal valuation specialists in assessing the fair value methodologies applied and evaluating the reasonableness of certain assumptions selected by management in the determination of the fair values of certain of the 13 reporting units and their indefinite-lived intangible assets. We compared the significant assumptions used by management to current industry and economic trends, recent historical performance, and other relevant factors. We performed sensitivity analyses of significant assumptions to evaluate the changes in fair values that would result from changes in the assumptions.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2004.

Cleveland, Ohio

November 10, 2022

TRANSDIGM GROUP INCORPORATED
CONSOLIDATED BALANCE SHEETS
AS OF SEPTEMBER 30, 2022 AND 2021
(Amounts in millions, except share amounts)

	2022	2021
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 3,001	\$ 4,787
Trade accounts receivable—Net	967	791
Inventories—Net	1,332	1,185
Prepaid expenses and other	349	267
Total current assets	5,649	7,030
PROPERTY, PLANT AND EQUIPMENT—NET	807	770
GOODWILL	8,641	8,568
OTHER INTANGIBLE ASSETS—NET	2,750	2,791
OTHER	260	156
TOTAL ASSETS	\$ 18,107	\$ 19,315
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Current portion of long-term debt	\$ 76	\$ 277
Short-term borrowings—trade receivable securitization facility	350	349
Accounts payable	279	227
Accrued and other current liabilities	721	810
Total current liabilities	1,426	1,663
LONG-TERM DEBT	19,369	19,372
DEFERRED INCOME TAXES	596	485
OTHER NON-CURRENT LIABILITIES	482	705
Total liabilities	21,873	22,225
TD GROUP STOCKHOLDERS' DEFICIT:		
Common stock - \$.01 par value; authorized 224,400,000 shares; issued 60,049,685 and 59,403,100 at September 30, 2022 and September 30, 2021, respectively	1	1
Additional paid-in capital	2,113	1,830
Accumulated deficit	(3,914)	(3,705)
Accumulated other comprehensive loss	(267)	(248)
Treasury stock, at cost; 5,688,639 and 4,198,226 shares at September 30, 2022 and September 30, 2021, respectively	(1,706)	(794)
Total TD Group stockholders' deficit	(3,773)	(2,916)
NONCONTROLLING INTERESTS	7	6
Total stockholders' deficit	(3,766)	(2,910)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$ 18,107	\$ 19,315

See notes to consolidated financial statements

TRANSDIGM GROUP INCORPORATED
CONSOLIDATED STATEMENTS OF INCOME
(Amounts in millions, except per share amounts)

	Fiscal Years Ended September 30,		
	2022	2021	2020
NET SALES	\$ 5,429	\$ 4,798	\$ 5,103
COST OF SALES	2,330	2,285	2,456
GROSS PROFIT	3,099	2,513	2,647
SELLING AND ADMINISTRATIVE EXPENSES	748	685	727
AMORTIZATION OF INTANGIBLE ASSETS	136	137	169
INCOME FROM OPERATIONS	2,215	1,691	1,751
INTEREST EXPENSE—NET	1,076	1,059	1,029
REFINANCING COSTS	1	37	28
OTHER EXPENSE (INCOME)	18	(51)	(46)
GAIN ON SALE OF BUSINESSES—NET	(7)	(69)	—
INCOME FROM CONTINUING OPERATIONS BEFORE INCOME TAXES	1,127	715	740
INCOME TAX PROVISION	261	34	87
INCOME FROM CONTINUING OPERATIONS	866	681	653
INCOME FROM DISCONTINUED OPERATIONS, NET OF TAX	1	—	47
NET INCOME	867	681	700
LESS: NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	(1)	(1)	(1)
NET INCOME ATTRIBUTABLE TO TD GROUP	\$ 866	\$ 680	\$ 699
NET INCOME APPLICABLE TO TD GROUP COMMON STOCKHOLDERS	\$ 780	\$ 607	\$ 514
Earnings per share attributable to TD Group common stockholders			
Earnings per share from continuing operations—basic and diluted	\$ 13.38	\$ 10.41	\$ 8.14
Earnings per share from discontinued operations—basic and diluted	0.02	—	0.82
Earnings per share	\$ 13.40	\$ 10.41	\$ 8.96
Cash dividends declared per common share	\$ 18.50	\$ —	\$ 32.50
Weighted-average shares outstanding:			
Basic and diluted	58.2	58.4	57.3

See notes to consolidated financial statements

TRANSDIGM GROUP INCORPORATED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Amounts in millions)

	Fiscal Years Ended September 30,		
	2022	2021	2020
Net income	\$ 867	\$ 681	\$ 700
Less: Net income attributable to noncontrolling interests	(1)	(1)	(1)
Net income attributable to TD Group	\$ 866	\$ 680	\$ 699
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustment	(379)	90	76
Unrealized gain (loss) on derivatives	352	73	(130)
Pension and postretirement benefit plans adjustment	8	(10)	32
Other comprehensive (loss) income, net of tax, attributable to TD Group	(19)	153	(22)
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO TD GROUP	\$ 847	\$ 833	\$ 677

See notes to consolidated financial statements

TRANSDIGM GROUP INCORPORATED
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT
(Amounts in millions, except share amounts)

	TD Group Stockholders								
	Common Stock			Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Stock		Noncontrolling Interests	Total
	Number of Shares	Par Value	Additional Paid-In Capital			Number of Shares	Value		
BALANCE—September 30, 2019	57,623,311	\$ 1	\$ 1,379	\$ (3,120)	\$ (379)	(4,161,326)	\$ (775)	\$ 10	\$ (2,884)
Changes in noncontrolling interest of consolidated subsidiaries, net	—	—	—	—	—	—	—	(6)	(6)
Special dividends and vested dividend equivalents declared	—	—	—	(1,864)	—	—	—	—	(1,864)
Accrued unvested dividend equivalents and other	—	—	—	(74)	—	—	—	—	(74)
Compensation expense recognized for employee stock options	—	—	86	—	—	—	—	—	86
Exercise of employee stock options	988,717	—	116	—	—	—	—	—	116
Stock repurchases under repurchase program	—	—	—	—	—	(36,900)	(19)	—	(19)
Net income attributable to TD Group	—	—	—	699	—	—	—	—	699
Foreign currency translation adjustment, net of tax	—	—	—	—	76	—	—	—	76
Unrealized loss on derivatives, net of tax	—	—	—	—	(130)	—	—	—	(130)
Pension and postretirement benefit plans adjustment, net of tax	—	—	—	—	32	—	—	—	32
BALANCE—September 30, 2020	58,612,028	\$ 1	\$ 1,581	\$ (4,359)	\$ (401)	(4,198,226)	\$ (794)	\$ 4	\$ (3,968)
Changes in noncontrolling interest of consolidated subsidiaries, net	—	—	—	—	—	—	—	2	2
Accrued unvested dividend equivalents and other	—	—	—	(26)	—	—	—	—	(26)
Compensation expense recognized for employee stock options	—	—	121	—	—	—	—	—	121
Exercise of employee stock options	791,072	—	128	—	—	—	—	—	128
Net income attributable to TD Group	—	—	—	680	—	—	—	—	680
Foreign currency translation adjustment, net of tax	—	—	—	—	90	—	—	—	90
Unrealized gain on derivatives, net of tax	—	—	—	—	73	—	—	—	73
Pension and postretirement benefit plans adjustment, net of tax	—	—	—	—	(10)	—	—	—	(10)
BALANCE—September 30, 2021	59,403,100	\$ 1	\$ 1,830	\$ (3,705)	\$ (248)	(4,198,226)	\$ (794)	\$ 6	\$ (2,910)
Changes in noncontrolling interest of consolidated subsidiaries, net	—	—	—	—	—	—	—	1	1
Special dividends and vested dividend equivalents declared	—	—	—	(1,045)	—	—	—	—	(1,045)
Accrued unvested dividend equivalents and other	—	—	—	(30)	—	—	—	—	(30)
Compensation expense recognized for employee stock options	—	—	151	—	—	—	—	—	151
Exercise of employee stock options	646,585	—	132	—	—	—	—	—	132
Stock repurchases under repurchase program	—	—	—	—	—	(1,490,413)	(912)	—	(912)
Net income attributable to TD Group	—	—	—	866	—	—	—	—	866
Foreign currency translation adjustment, net of tax	—	—	—	—	(379)	—	—	—	(379)
Unrealized gain on derivatives, net of tax	—	—	—	—	352	—	—	—	352
Pension and postretirement benefit plans adjustment, net of tax	—	—	—	—	8	—	—	—	8
BALANCE—September 30, 2022	60,049,685	\$ 1	\$ 2,113	\$ (3,914)	\$ (267)	(5,688,639)	\$ (1,706)	\$ 7	\$ (3,766)

See notes to consolidated financial statements

TRANSDIGM GROUP INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in millions)

	Fiscal Years Ended September 30,		
	2022	2021	2020
OPERATING ACTIVITIES:			
Net income	\$ 867	\$ 681	\$ 700
Income from discontinued operations, net of tax	(1)	—	(47)
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	116	115	114
Amortization of intangible assets and product certification costs	137	138	169
Amortization of debt issuance costs, original issue discount and premium	34	34	33
Amortization of inventory step-up	3	6	—
Amortization of loss contract reserves	(39)	(55)	(36)
Refinancing costs	1	37	28
Gain on sale of businesses, net	(7)	(69)	—
Non-cash stock compensation expense	153	129	93
Deferred income taxes	(22)	34	24
Foreign currency exchange (gains) losses	(40)	11	22
Gain on insurance proceeds from fire	—	(24)	—
Loss on settlement of the Esterline Retirement Plan (the “ERP”)	22	—	—
Contribution to the unfunded portion of the ERP	(16)	—	—
Changes in assets/liabilities, net of effects from acquisitions and sales of businesses:			
Trade accounts receivable	(190)	(78)	352
Inventories	(134)	79	(62)
Income taxes payable (receivable)	58	(63)	(144)
Other assets	(56)	(33)	(16)
Accounts payable	58	3	(62)
Accrued interest	(21)	14	85
Accrued and other liabilities	25	(46)	(40)
Net cash provided by operating activities	<u>948</u>	<u>913</u>	<u>1,213</u>
INVESTING ACTIVITIES:			
Capital expenditures	(119)	(105)	(105)
Acquisition of businesses, net of cash acquired	(437)	(963)	—
Net proceeds from sale of businesses	3	259	904
Insurance proceeds for fixed assets damaged from fire	—	24	—
Net cash (used in) provided by investing activities	<u>(553)</u>	<u>(785)</u>	<u>799</u>
FINANCING ACTIVITIES:			
Proceeds from exercise of stock options	132	128	116
Dividends and dividend equivalent payments	(1,091)	(73)	(1,928)
Repurchases of common stock	(912)	—	(19)
Proceeds from issuance of senior subordinated notes, net	—	1,932	4,114
Repayments of senior subordinated notes, net	—	(1,982)	(1,167)
Proceeds from revolving credit facility	—	200	200
Repayment on revolving credit facility	(200)	(200)	—
Repayment on term loans	(75)	(75)	(75)
Financing costs and other, net	(2)	—	(11)
Net cash (used in) provided by financing activities	<u>(2,148)</u>	<u>(70)</u>	<u>1,230</u>
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	<u>(33)</u>	<u>12</u>	<u>8</u>
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	<u>(1,786)</u>	<u>70</u>	<u>3,250</u>
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	4,787	4,717	1,467
CASH AND CASH EQUIVALENTS, END OF PERIOD	<u>\$ 3,001</u>	<u>\$ 4,787</u>	<u>\$ 4,717</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the period for interest, net	<u>\$ 1,057</u>	<u>\$ 1,008</u>	<u>\$ 923</u>
Cash paid during the period for income taxes, net of refunds	<u>\$ 220</u>	<u>\$ 83</u>	<u>\$ 223</u>

See notes to consolidated financial statements

TRANSDIGM GROUP INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FISCAL YEARS ENDED SEPTEMBER 30, 2022, 2021 AND 2020

1. DESCRIPTION OF THE BUSINESS

TD Group, through its wholly-owned subsidiary, TransDigm Inc., is a leading global designer, producer and supplier of highly engineered aircraft components for use on nearly every commercial and military aircraft in service today. TransDigm Inc., along with TransDigm Inc.'s direct and indirect wholly-owned operating subsidiaries (collectively, with TD Group, the "Company" or "TransDigm"), offers a broad range of proprietary aerospace products. TD Group has no significant assets or operations other than its 100% ownership of TransDigm Inc. TD Group's common stock is listed on the New York Stock Exchange, or the NYSE, under the trading symbol "TDG."

TransDigm's major product offerings, substantially all of which are ultimately provided to end-users in the aerospace industry, include mechanical/electro-mechanical actuators and controls, ignition systems and engine technology, specialized pumps and valves, power conditioning devices, specialized AC/DC electric motors and generators, batteries and chargers, engineered latching and locking devices, engineered rods, engineered connectors and elastomer sealing solutions, databus and power controls, cockpit security components and systems, specialized and advanced cockpit displays, engineered audio, radio and antenna systems, specialized lavatory components, seat belts and safety restraints, engineered and customized interior surfaces and related components, advanced sensor products, switches and relay panels, thermal protection and insulation, lighting and control technology, parachutes, high performance hoists, winches and lifting devices, and cargo loading, handling and delivery systems.

2. ACQUISITIONS AND DIVESTITURES

Acquisitions

DART Aerospace – On March 14, 2022, the Company entered into a definitive agreement to acquire all the outstanding stock of DART Aerospace ("DART") for a total purchase price of \$359 million, which is net of a working capital settlement received in the fourth quarter of fiscal 2022 of approximately \$1 million. The acquisition was completed on May 25, 2022 and financed through existing cash on hand. DART operates from four primary facilities (Hawkesbury, Ontario, Canada; Portland, Oregon; Fort Collins, Colorado and Chihuahua, Mexico) and is a leading provider of highly engineered, unique helicopter mission equipment solutions that predominantly service civilian aircraft. The products are primarily proprietary with significant aftermarket content. DART's operating results are included within TransDigm's Airframe segment.

The Company accounted for the DART acquisition using the acquisition method and included the results of operations of the acquisition in its consolidated financial statements from the effective date of the acquisition. The Company made an initial allocation of the purchase price at the date of acquisition based upon its understanding of the fair value of the acquired assets and assumed liabilities. As of September 30, 2022, the measurement period (not to exceed one year) is open; therefore, the assets acquired and liabilities assumed related to the DART acquisition are subject to adjustment until the end of the respective measurement period. The allocation of the purchase price is preliminary and will likely change in future periods, perhaps materially, as fair value estimates of the assets acquired and liabilities assumed are finalized, including those related to deferred taxes and income taxes. The Company is in the process of finalizing a third-party valuation of certain intangible assets and tangible assets of DART. The fair values of acquired intangibles are determined based on estimates and assumptions that are deemed reasonable by the Company. Significant assumptions include the discount rates and certain assumptions that form the basis of the forecasted results of the acquired business including revenue, earnings before interest, taxes, depreciation and amortization ("EBITDA"), growth rates, royalty rates and technology obsolescence rates. These assumptions are forward looking and could differ from future economic and market conditions. Pro forma net sales and results of operations for the acquisition had it occurred at the beginning of the fiscal years ended September 30, 2022 or September 30, 2021 are not material and, accordingly, are not provided.

The allocation of the estimated fair value of assets acquired and liabilities assumed in the DART acquisition as of the May 25, 2022 acquisition date is summarized in the table below (in millions):

	Preliminary Allocation	Measurement Period Adjustments ⁽²⁾	Adjusted Preliminary Allocation
Assets acquired (excluding cash):			
Trade accounts receivable	\$ 16	\$ (1)	\$ 15
Inventories	33	—	33
Prepaid expenses and other	4	1	5
Property, plant and equipment	9	—	9
Goodwill	236	(34)	202 ⁽¹⁾
Other intangible assets	112	36	148 ⁽¹⁾
Other	8	—	8
Total assets acquired (excluding cash)	418	2	420
Liabilities assumed:			
Accounts payable	4	—	4
Accrued and other current liabilities	11	2	13
Deferred income taxes	35	1	36
Other non-current liabilities	8	—	8
Total liabilities assumed	58	3	61
Net assets acquired	\$ 360	\$ (1)	\$ 359

⁽¹⁾ The Company expects that none of the approximately \$202 million of goodwill and \$148 million of other intangible assets recognized for the acquisition will be deductible for tax purposes.

⁽²⁾ Measurement period adjustments primarily related to the adjustments in the fair values of the acquired other intangible assets from the third-party valuation. The offset was to goodwill.

Extant Aerospace Acquisitions – For the fiscal year ended September 30, 2022, the Company's Extant Aerospace subsidiary, which is included in TransDigm's Power & Control segment, completed a series of acquisitions of substantially all of the assets and technical data rights of certain product lines, each meeting the definition of a business, for a total purchase price of \$88 million, of which \$78 million was paid via existing cash on hand and \$10 million was accrued as a component of accrued and other current liabilities in the consolidated balance sheet as of September 30, 2022. The allocation of the purchase prices is preliminary and will likely change in future periods as fair value estimates of the assets acquired and liabilities assumed are finalized. The Company expects that all of the approximately \$57 million of goodwill and all of the approximately \$37 million of other intangible assets recognized for the acquisitions will be deductible for tax purposes over 15 years. Pro forma net sales and results of operations for the acquisitions, had they occurred at the beginning of the fiscal years ended September 30, 2022 or September 30, 2021, are not material and, accordingly, are not provided. Acquisitions completed by the Company's Extant Aerospace subsidiary in fiscal 2021 and fiscal 2020 were not material.

Cobham Aero Connectivity – On November 24, 2020, the Company entered into a definitive agreement to acquire all the outstanding stock of Chelton Limited, Chelton Avionics Holdings, Inc. and Mastsystem Int'l Oy, collectively, Cobham Aero Connectivity ("CAC"), for a total purchase price of \$945 million. The acquisition was substantially completed on January 5, 2021 and financed through existing cash on hand. The Company completed the remainder of the acquisition of CAC on February 12, 2021, also through existing cash on hand. CAC operates from two primary facilities (Marlow, United Kingdom and Prescott, Arizona) and is a leading provider of highly engineered antennas and radios for the aerospace end market. The products are primarily proprietary with significant aftermarket content and have a strong presence across major defense platforms as well as select commercial applications. CAC's operating results are included within TransDigm's Airframe segment.

The Company accounted for the CAC acquisition using the acquisition method of accounting and third-party valuation appraisals and included the results of operations of the acquisition in its consolidated financial statements from the effective dates of the acquisition. The total purchase price of CAC was allocated to the underlying assets acquired and liabilities assumed based upon the respective fair value at the dates of acquisition. To the extent the purchase price exceeded the fair value of the net identifiable tangible and intangible assets acquired, such excess was allocated to goodwill. The fair values of acquired intangibles and certain liabilities, such as loss contract reserves, are determined based on estimates and assumptions that are deemed reasonable by the Company. Significant assumptions used to determine the fair values of acquired intangible assets include the discount rates and certain assumptions that form the basis of the forecasted results of the acquired business including revenue growth rates, EBITDA margins, royalty rates and technology obsolescence rates. Significant assumptions used to determine the fair value of the loss contract reserves using the discounted cash flow model include discount rates and forecasted costs to be incurred under the long-term contracts and at-market bid prices for respective contracts. These assumptions are forward looking and could differ from future economic and market conditions.

The final allocation of the fair value of assets acquired and liabilities assumed in the CAC acquisition as of the acquisition dates, as well as measurement period adjustments recorded within the permissible one year measurement period, are summarized in the table below (in millions):

	Preliminary Allocation	Measurement Period Adjustments ⁽²⁾	Final Allocation
Assets acquired (excluding cash):			
Trade accounts receivable	\$ 31	\$ 1	\$ 32
Inventories	27	2	29
Prepaid expenses and other	10	(3)	7
Property, plant and equipment	18	3	21
Goodwill	636	61	697 ⁽¹⁾
Other intangible assets	309	15	324 ⁽¹⁾
Other	34	(3)	31
Total assets acquired (excluding cash)	1,065	76	1,141
Liabilities assumed:			
Accounts payable	15	3	18
Accrued and other current liabilities	38	6	44
Deferred income taxes	38	(7)	31
Other non-current liabilities	29	74	103
Total liabilities assumed	120	76	196
Net assets acquired	\$ 945	\$ —	\$ 945

⁽¹⁾ Of the approximately \$697 million of goodwill recognized for the acquisition, approximately \$65 million is deductible for tax purposes. Of the approximately \$324 million of other intangible assets recognized for the acquisition, approximately \$105 million is deductible for tax purposes. The goodwill and other intangible assets are deductible over 15 years.

⁽²⁾ Primarily relates to the recording of loss contract reserves within accrued and other current liabilities and other non-current liabilities associated with acquired ongoing long-term contracts with customers that were incurring negative gross margins as of the date of acquisition. The offset was to goodwill. Based on our review of these contracts, we concluded that the terms of certain contracts were unfavorable when compared to market terms as of the acquisition date. The loss contract reserves, totaling \$80.6 million, will be released over an estimated three to five year period. As of September 30, 2022 and 2021, \$52.1 million and \$75.7 million remains reserved for.

The acquisitions completed by the Company strengthen and expand the Company's position to design, produce and supply highly engineered proprietary aerospace components in niche markets with significant aftermarket content and provide opportunities to create value through the application of our three core value-driven operating strategies (obtaining profitable new business, continually improving our cost structure, and providing highly engineered value-added products to customers). The purchase price paid reflect the current EBITDA and cash flows, as well as the future EBITDA and cash flows expected to be generated by the businesses, which are driven in most cases by the recurring aftermarket consumption over the life of a particular aircraft, estimated to be approximately 25 to 30 years.

Divestitures

ScioTeq and TREALITY Simulation Visual Systems – On June 30, 2021, TransDigm completed the divestiture of its ScioTeq and TREALITY Simulation Visual Systems businesses (“ScioTeq and TREALITY”) to OpenGate Capital (“OpenGate”) for approximately \$200 million in cash. During the second quarter of fiscal 2021, the Company determined ScioTeq and TREALITY met the criteria to be classified as held for sale. ScioTeq and TREALITY were acquired by TransDigm as part of its acquisition of Esterline Technologies Corporation (“Esterline”) in March 2019 and were included in TransDigm’s Airframe segment.

Technical Airborne Components – On April 27, 2021, TransDigm completed the divestiture of the Technical Airborne Components business (“TAC”) to Searchlight Capital Partners for approximately \$40 million in cash. TAC was included in TransDigm’s Airframe segment.

The net gain on sale recognized in fiscal 2021 as a result of the ScioTeq and TREALITY and TAC divestitures was approximately \$68 million, which was classified as a component of gain on sale of businesses-net within the consolidated statements of income. During the second quarter of fiscal 2022, the Company received approximately \$3 million in cash proceeds related to a final working capital settlement for the ScioTeq and TREALITY divestiture. These proceeds are classified as a component of gain on sale of businesses-net in the consolidated statements of income.

Racal Acoustics – On January 29, 2021, TransDigm completed the divestiture of the Racal Acoustics business (“Racal”) to Invisio Communications AB for approximately \$20 million in cash. Racal was acquired by TransDigm as part of its acquisition of Esterline in March 2019 and was included in TransDigm’s Non-aviation segment. The gain on sale recognized in fiscal 2021 as a result of the divestiture is not material and was classified as a component of gain on sale of businesses-net in the consolidated statements of income.

Avista, Inc. – On November 17, 2020, TransDigm completed the divestiture of the Avista, Inc. business (“Avista”) to Belcan, LLC for approximately \$8 million in cash. Avista was acquired by TransDigm as part of its acquisition of Esterline in March 2019 and was included in TransDigm’s Airframe segment. The gain on sale recognized in fiscal 2021 as a result of the divestiture was not material and is classified as a component of gain on sale of businesses-net in the consolidated statements of income.

Souriau-Sunbank Connection Technologies – On December 20, 2019, TransDigm completed the divestiture of the Souriau-Sunbank Connection Technologies business (“Souriau-Sunbank”) to Eaton Corporation plc (“Eaton”) for approximately \$920 million. Souriau-Sunbank was acquired by TransDigm as part of its acquisition of Esterline in March 2019 and was included in TransDigm’s Non-aviation segment. Refer to Note 23, “Discontinued Operations” for additional information.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Consolidation – The accompanying consolidated financial statements were prepared in conformity with U.S. GAAP and include the accounts of TD Group and subsidiaries. All significant intercompany balances and transactions have been eliminated. Certain reclassifications within the notes to the consolidated financial statements have been made to the prior year amounts to conform to the current year presentation, none of which are material.

Revenue Recognition – Revenue is recognized from the sale of products when control transfers to the customer, which is demonstrated by our right to payment, a transfer of title, a transfer of the risk and rewards of ownership, or the customer acceptance, but most frequently upon shipment where the customer obtains physical possession of the goods. The majority of the Company’s revenue is recorded at a point in time. Sales recognized over time are generally accounted for using an input measure to determine progress completed at the end of the period. Sales for service contracts generally are recognized as the services are provided. Refer to Note 5, “Revenue Recognition,” for further details.

Shipping and Handling Costs – Shipping and handling costs are included in cost of sales in the consolidated statements of income.

Research and Development Costs – The Company expenses research and development costs as incurred and classifies such amounts in selling and administrative expenses. The expense recognized for research and development costs for the fiscal years ended September 30, 2022, 2021 and 2020 was approximately \$94.9 million, \$105.6 million, and \$130.9 million, respectively.

Cash Equivalents—The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Allowance for Credit Losses – The Company's allowance for credit losses is the allowance for uncollectible accounts. The allowance for uncollectible accounts reduces the trade accounts receivable balance to the estimated net realizable value equal to the amount that is expected to be collected. The Company's method for developing its allowance for credit losses is based on historical write-off experience, the aging of receivables, an assessment of the creditworthiness of customers, economic conditions and other external market information. The allowance also incorporates a provision for the estimated impact of disputes with customers. All provisions for allowances for uncollectible accounts are included in selling and administrative expenses. The determination of the amount of the allowance for uncollectible accounts is subject to judgment and estimation by management. If circumstances change or economic conditions deteriorate or improve, the allowance for uncollectible accounts could increase or decrease. Refer to Note 7, "Trade Accounts Receivable," for further information.

Inventories – Inventories are stated at the lower of cost or net realizable value. Cost of inventories is generally determined by the average cost and the first-in, first-out ("FIFO") methods and includes material, labor and overhead related to the manufacturing process. Provision for potentially obsolete or slow-moving inventory is made based on management's analysis of inventory levels and future sales forecasts. Refer to Note 8, "Inventories," for further details.

Property, Plant and Equipment – Property, plant and equipment are stated at cost and include improvements which significantly increase capacities or extend the useful lives of existing plant and equipment. Depreciation is computed using the straight-line method over the following estimated useful lives: land improvements from 10 to 20 years, buildings and improvements from 5 to 30 years, machinery and equipment from 2 to 10 years and furniture and fixtures from 3 to 10 years. Net gains or losses related to asset dispositions are recognized in earnings in the period in which dispositions occur. Routine maintenance, repairs and replacements are expensed as incurred. Amortization expense of assets accounted for as finance leases is included within depreciation expense.

Property, plant and equipment is assessed for potential impairment whenever indicators of impairment are present by determining whether the carrying value of the property can be recovered through projected, undiscounted cash flows from future operations over the property's remaining estimated useful life. Any impairment recognized is the amount by which the carrying amount exceeds the fair value of the asset. Fair value is measured based on quoted market prices in active markets, if available. If quoted market prices are not available, the estimate of fair value is based on various valuation techniques, including the discounted value of estimated future cash flows. Refer to Note 9, "Property, Plant and Equipment," for further details.

Debt Issuance Costs, Premiums and Discounts – The cost of obtaining financing as well as premiums and discounts are amortized using the effective interest method over the terms of the respective obligations as a component of interest expense within the consolidated statements of income. Debt issuance costs are presented in the consolidated balance sheets as a direct reduction from the carrying amount of the related debt liabilities. Refer to Note 12, "Debt," for further details.

Financial Instruments – Interest rate swap and cap agreements are used to manage interest rate risk associated with floating-rate borrowings under our credit facility. The interest rate swap and cap agreements utilized by the Company effectively modify the Company's exposure to interest rate risk by converting a portion of the Company's variable rate debt to a fixed rate basis through the expiration date of the interest rate swap and cap agreements, thereby reducing the impact of interest rate volatility on future interest expense. These agreements involve the receipt of variable rate amounts in exchange for fixed rate interest payments over the term of the agreements without an exchange of the underlying principal amount. These derivative instruments qualify as effective cash flow hedges under U.S. GAAP.

The Company transacts business in various foreign currencies, which subjects the Company's cash flows and results of operations to exposure related to changes in foreign currency exchange rates. These exposures arise primarily from purchases or sales of products and services from third parties. Foreign currency forward exchange contracts provide for the purchase or sale of foreign currencies at specified future dates at specified exchange rates, and are used to offset changes in the fair value of certain assets or liabilities or forecasted cash flows resulting from transactions denominated in foreign currencies.

For the interest rate swap and cap agreements and the foreign currency forward contracts designated as cash flow hedges, the effective portion of the gain or loss from the financial instruments is reported as a component of accumulated other comprehensive loss in stockholders' deficit and subsequently reclassified into earnings in the same line as the hedged item in the same period or periods during which the hedged item affected earnings. As the interest rate swap and cap agreements are used to manage interest rate risk, any gains or losses from the derivative instruments that are reclassified into earnings are recognized in interest expense-net in the consolidated statements of income. As the foreign currency forward exchange contracts are used to manage foreign currency exposure primarily arising from sales to third parties, any gains or losses from the derivative instruments that are reclassified into earnings are recognized in net sales in the consolidated statements of income. The cash flows from settled contracts are recognized in net cash provided by operating activities in the consolidated statements of cash flows. Refer to Note 21, "Derivatives and Hedging Activities," for further details.

Goodwill and Other Intangible Assets – In accordance with ASC 805, “Business Combinations,” the Company uses the acquisition method of accounting to allocate costs of acquired businesses to the assets acquired and liabilities assumed based on their estimated fair values at the dates of acquisition. The excess costs of acquired businesses over the fair values of the assets acquired and liabilities assumed were recognized as goodwill. The valuations of the acquired assets and liabilities assumed will impact the determination of future operating results. Determining the fair value of assets acquired and liabilities assumed requires management’s judgment and often involves the use of significant estimates and assumptions, including assumptions with respect to future cash inflows and outflows, revenue growth rates and EBITDA margins, discount rates, customer attrition rates, royalty rates, asset lives and market multiples, among other items. We determine the fair values of intangible assets acquired generally in consultation with third-party valuation advisors. Fair value adjustments to the Company’s assets and liabilities are recognized and the results of operations of the acquired business are included in our consolidated financial statements from the effective date of the merger or acquisition. Intangible assets other than goodwill are recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if the intangible asset can be sold, transferred, licensed or exchanged, regardless of the Company’s intent to do so.

Goodwill is the excess of the purchase price paid over the estimated fair value of the net assets of a business acquired. Other intangible assets consist of identifiable intangibles acquired or recognized in accounting for the acquisitions (trademarks, trade names, technology, customer relationships, order backlog and other intangible assets). Goodwill and intangible assets that have indefinite useful lives (i.e., trademarks and trade names) are subject to annual impairment testing. Management determines fair value using a discounted future cash flow analysis or other accepted valuation techniques. The Company performs an annual impairment test for goodwill and other intangible assets as of the first day of the fourth fiscal quarter of each year, or more frequently, if an event occurs or circumstances change that would more likely than not reduce fair value below carrying value.

At the time of goodwill impairment testing, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value, and whether it is therefore necessary to perform the quantitative goodwill impairment test. If, after considering all events and circumstances that support a qualitative evaluation the Company determines that it is not more-likely-than-not that the goodwill and/or indefinite-lived intangible assets are impaired, then performing the single-step quantitative analysis to determine if there is impairment would be unnecessary. Conversely, if it is more-likely-than-not that the goodwill and/or indefinite-lived intangible assets are impaired, then the Company would proceed with the single-step quantitative analysis to determine if there is a goodwill and/or indefinite-lived intangible asset impairment loss. In this application, the definition of “more-likely-than-not” is interpreted as a likelihood of more than 50%.

U.S. GAAP requires that the annual, and any interim, impairment assessment be performed at the reporting unit level. Our reporting units have been identified at the operating unit level, which is one level below our operating segments. Substantially all goodwill was determined and recognized for each reporting unit pursuant to the accounting for the merger or acquisition as of the date of each transaction. With respect to acquisitions integrated into an existing reporting unit, any acquired goodwill is combined with the goodwill of the reporting unit.

The impairment test for indefinite lived intangible assets consists of a comparison between their fair values and carrying values. If the carrying amounts of intangible assets that have indefinite useful lives exceed their fair values, an impairment loss will be recognized in an amount equal to the sum of any such excesses.

The Company had 47 reporting units with goodwill and 44 reporting units with indefinite-lived intangible assets as of the first day of the fourth quarter of fiscal 2022, the date of the annual impairment test. Based on its initial qualitative assessment over each of the reporting units, the Company identified 13 reporting units to test for impairment using a quantitative test for both goodwill and indefinite-lived intangible assets. The 13 reporting units selected for quantitative testing have higher commercial aerospace content and, as a result, have been more adversely impacted by the COVID-19 pandemic. The estimated fair values of each of these reporting units and other indefinite-lived intangible assets were in excess of their respective carrying values. The Company performed a sensitivity analysis on certain company-specific projected data, specifically earnings before taxes and net sales, which are significant assumptions in the discounted cash flow valuation model to determine estimated fair value. With a ten percentage point decrease in earnings before taxes and net sales data, all of the reporting units would continue to have fair values in excess of their respective carrying values of goodwill and other indefinite-lived intangible assets. As a result of the impairment testing performed as of the first day of the fourth quarter, no indefinite-lived intangible assets or goodwill was determined to be impaired. As economic and market conditions have not changed significantly since the first day of the fourth quarter, this conclusion remains appropriate as of September 30, 2022.

The Company assesses the recoverability of its amortizable intangible assets only when indicators of impairment are present by determining whether the carrying value can be recovered through projected, undiscounted cash flows from future operations over their remaining lives. Amortization of amortizable intangible assets is computed using the straight-line method over the following estimated useful lives: technology from 20 to 22 years, order backlog from 1 to 1.5 years, customer relationships over 20 years and other intangible assets over 20 years. No indicators of impairment on the amortizable intangible assets were identified in fiscal 2022.

Stock-Based Compensation – The Company records stock-based compensation expense using the Black-Scholes pricing model based on certain valuation assumptions. Compensation expense is recorded over the vesting periods of the stock options, adjusted for expected forfeitures. The Company has classified stock-based compensation primarily within selling and administrative expenses to correspond with the classification of employees that receive stock option grants. The Company also evaluates any subsequent changes to the respective option holders terms under the modification rules of ASC 718. If determined to be a modification, the Black-Scholes pricing model is updated as of the date of the modification resulting in a cumulative catch up to expense, if necessary. Refer to Note 18, “Stock-Based Compensation,” for further information.

Income Taxes – The provision for income taxes is calculated using the asset and liability method. Under the asset and liability method, deferred income taxes are recognized for the tax effect of temporary differences between the financial statement carrying amount of assets and liabilities and the amounts used for income tax purposes and for certain changes in valuation allowances. Valuation allowances are recorded to reduce certain deferred tax assets when, in our estimation, it is more likely than not that a tax benefit will not be realized. We recognize uncertain tax positions when we have determined it is more likely than not that a tax position will be sustained upon examination. However, new information may become available, or applicable laws or regulations may change, thereby resulting in a favorable or unfavorable adjustment to amounts recorded. Refer to Note 14, “Income Taxes,” for further information.

Estimates – The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Comprehensive Income (Loss) – The term “comprehensive income (loss)” represents the change in stockholders’ equity (deficit) from transactions and other events and circumstances resulting from non-stockholder sources. The Company’s accumulated other comprehensive income or loss, consisting principally of fair value adjustments to its interest rate swap and cap agreements (net of tax), cumulative foreign currency translation adjustments and pension liability adjustments (net of tax), is reported separately in the accompanying consolidated statements of comprehensive income.

Foreign Currency Translation and Transactions – The assets and liabilities of subsidiaries located outside the United States are translated into U.S. dollars at the rates of exchange in effect at the balance sheet dates. Revenue and expense items are translated at the average monthly exchange rates prevailing during the period. Gains and losses resulting from foreign currency transactions are recognized currently in income and those resulting from translation of financial statements, including gains and losses from certain intercompany transactions, are accumulated as a separate component of other comprehensive income (loss) for the period. Foreign currency (gains) or losses recognized in cost of sales on the consolidated statements of income from changes in exchange rates were (\$39.7) million, \$10.9 million and \$22.0 million for the fiscal years ended September 30, 2022, 2021 and 2020, respectively.

Earnings per Share – Earnings per share information is determined using the two-class method, which includes the weighted-average number of common shares outstanding during the period and other securities that participate in cash dividends (“participating securities”). Our vested stock options are considered “participating securities” because they include non-forfeitable rights to cash dividends. In applying the two-class method, earnings are allocated to both common shares and participating securities based on their respective weighted-average shares outstanding for the period. Diluted earnings per share information may include the additional effect of other securities, if dilutive, in which case the dilutive effect of such securities is calculated using the treasury stock method. Contingently issuable shares are not included in earnings per share until the period in which the contingency is satisfied. Refer to Note 6, “Earnings Per Share,” for further information.

Pension Benefits – The Company accounts for net periodic pension benefit cost (income) using the end of the fiscal year as our measurement date. Management selects appropriate assumptions including the discount rate, rate of increase in future compensation levels and assumed long-term rate of return on plan assets. The assumptions are based upon historical results, the current economic environment and reasonable expectations of future events. Actual results which vary from our assumptions are accumulated and amortized over future periods, and accordingly, are recognized in expense in these periods. Significant differences between the assumptions and actual experience or significant changes in assumptions could impact the pension costs and the pension obligation. Refer to Note 13, “Retirement Plans,” for further information.

4. RECENT ACCOUNTING PRONOUNCEMENTS

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Accounting Standards Codification ("ASC") 740) - Simplifying the Accounting for Income Taxes," which simplifies the accounting for income taxes by removing certain exceptions to the general principles in ASC 740. The amendments also improve consistent application of and simplify U.S. GAAP for other areas of ASC 740 by clarifying and amending existing guidance. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company adopted ASU 2019-12 on October 1, 2021. The adoption of this standard did not have a material impact on our consolidated financial statements and disclosures.

In March 2020, the FASB issued ASU 2020-04, "Reference Rate Reform." Certain amendments were provided for in ASU 2021-01, "Reference Rate Reform (ASC 848): Scope," which was issued in January 2021. This ASU provides optional guidance for a limited period of time to ease potential accounting impacts associated with transitioning away from reference rates that are expected to be discontinued, such as the London Interbank Offered Rate ("LIBOR"). The amendments in this ASU apply only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued. The amendments in this ASU are effective through December 31, 2022. The Company is evaluating the impact of reference rate reform on our existing Credit Agreement and our interest rate swap and cap agreements. To the extent that, prior to December 31, 2022, the Company enters into any transactions for which the optional practical expedients permissible under ASC 848 are applied, the adoption of this standard is not expected to have a material impact on the Company's consolidated financial statements and disclosures. The Company continues to monitor for future amendments, such as the current proposal by the FASB to defer the sunset date of reference rate reform relief to December 31, 2024.

5. REVENUE RECOGNITION

TransDigm's sales are concentrated in the aerospace and defense industry. The Company's customers include: distributors of aerospace components, commercial airlines, large commercial transport and regional and business aircraft OEMs, various armed forces of the United States and friendly foreign governments, defense OEMs, system suppliers, and various other industrial customers.

The majority of the Company's revenue is recorded at a point in time. Revenue is recognized from the sale of products when control transfers to the customer, which is demonstrated by our right to payment, a transfer of title, a transfer of the risk and rewards of ownership, or the customer acceptance, but most frequently upon shipment where the customer obtains physical possession of the goods.

In some contracts, control transfers to the customer over time, primarily in contracts where the customer is required to pay for the cost of both the finished and unfinished goods at the time of cancellation plus a reasonable profit relative to the work performed for products that were customized for the customer. Therefore, we recognize revenue over time for those agreements that have a right to margin and where the products being produced have no alternative use.

Based on our production cycle, it is generally expected that goods related to the revenue will be shipped and billed within the current year. For revenue recognized over time, we estimate the amount of revenue attributable to a contract earned at a given point during the production cycle based on certain costs, such as materials and labor incurred to date, plus the expected profit, which is a cost-to-cost input method.

We consider the contractual consideration payable by the customer and assess variable consideration that may affect the total transaction price. Variable consideration is included in the estimated transaction price when there is a basis to reasonably estimate the amount, including whether the estimate should be constrained in order to avoid a significant reversal of revenue in a future period. These estimates are based on historical experience, anticipated performance under the terms of the contract and our best judgment at the time.

When contracts are modified to account for changes in contract specifications and requirements, the Company considers whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications that are for goods or services that are not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification to an existing contract on the transaction price and our measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue on a cumulative catch-up basis. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

The Company's payment terms vary by the type and location of the customer and the products or services offered. The Company does not offer any payment terms that would meet the requirements for consideration as a significant financing component.

Shipping and handling fees and costs incurred in connection with products sold are recorded in cost of sales in the consolidated statements of income, and are not considered a performance obligation to our customers.

The Company pays sales commissions that relate to contracts for products or services that are satisfied at a point in time or over a period of one year or less and are expensed as incurred. These costs are reported as a component of selling and administrative expenses in the consolidated statements of income.

In fiscal 2022, 2021 and 2020, no customer individually accounted for 10% or more of the Company's net sales.

Net sales to foreign customers, primarily in Western Europe, Canada and Asia, were \$1.9 billion during the fiscal year ended 2022 and \$1.7 billion during the fiscal years ended 2021 and 2020, respectively.

Contract Assets and Liabilities – Contract assets reflect revenue recognized and performance obligations satisfied in advance of customer billing or reimbursable costs related to a specific contract. Contract liabilities (Deferred revenue) relate to payments received in advance of the satisfaction of performance under the contract. We receive payments from customers based on the terms established in our contracts. The following table summarizes our contract assets and liabilities balances (in millions):

	September 30, 2022	September 30, 2021
Contract assets, current ⁽¹⁾	\$ 119	\$ 70
Contract assets, non-current ⁽²⁾	1	2
Total contract assets	120	72
Contract liabilities, current ⁽³⁾	45	25
Contract liabilities, non-current ⁽⁴⁾	9	5
Total contract liabilities	54	30
Net contract assets	\$ 66	\$ 42

⁽¹⁾ Included in prepaid expenses and other on the consolidated balance sheets.

⁽²⁾ Included in other non-current assets on the consolidated balance sheets.

⁽³⁾ Included in accrued and other current liabilities on the consolidated balance sheets.

⁽⁴⁾ Included in other non-current liabilities on the consolidated balance sheets.

The increase in the Company's total contract assets during fiscal 2022 primarily is due to the timing and status of work in process and/or milestones of certain contracts. The increase in the Company's total contract liabilities during fiscal 2022 primarily is due to the receipt of advance payments as well as the contract liabilities of DART, which was acquired in May 2022.

For the fiscal year ended September 30, 2022, the revenue recognized that was previously included in contract liabilities was not material.

Refer to Note 17, "Segments," for disclosures related to the disaggregation of revenue.

6. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per share (in millions, except per share data) using the two-class method:

	Fiscal Years Ended September 30,		
	2022	2021	2020
Numerator for earnings per share:			
Income from continuing operations	\$ 866	\$ 681	\$ 653
Less: Net income attributable to noncontrolling interests	(1)	(1)	(1)
Net income from continuing operations attributable to TD Group	865	680	652
Less: Dividends paid on participating securities	(86)	(73)	(185)
Income from discontinued operations, net of tax	1	—	47
Net income applicable to TD Group common stockholders—basic and diluted	<u>\$ 780</u>	<u>\$ 607</u>	<u>\$ 514</u>
Denominator for basic and diluted earnings per share under the two-class method:			
Weighted-average common shares outstanding	54.8	54.8	53.9
Vested options deemed participating securities	3.4	3.6	3.4
Total shares for basic and diluted earnings per share	<u>58.2</u>	<u>58.4</u>	<u>57.3</u>
Earnings per share from continuing operations—basic and diluted	\$ 13.38	\$ 10.41	\$ 8.14
Earnings per share from discontinued operations—basic and diluted	0.02	—	0.82
Earnings per share	<u>\$ 13.40</u>	<u>\$ 10.41</u>	<u>\$ 8.96</u>

7. TRADE ACCOUNTS RECEIVABLE

Trade accounts receivable consist of the following (in millions):

	September 30, 2022	September 30, 2021
Trade accounts receivable—gross	\$ 1,002	\$ 821
Allowance for uncollectible accounts	(35)	(30)
Trade accounts receivable—Net	<u>\$ 967</u>	<u>\$ 791</u>

At September 30, 2022, one customer individually accounted for approximately 10% of the Company's trade accounts receivable-gross. In addition, approximately 40% of the Company's trade accounts receivable-gross was due from entities that operate principally outside of the United States - primarily in Western Europe, Canada and Asia. Credit is extended based on an evaluation of each customer's financial condition and collateral is generally not required.

The increase in the allowance for uncollectible accounts for the fiscal year ended September 30, 2022 is primarily related to an increase in the estimate for credit losses on accounts receivable for certain non-U.S. customers and certain customers impacted by the Russia and Ukraine conflict. The allowance for uncollectible accounts is assessed individually at each operating unit by the operating unit's management team.

Refer to Note 3, "Summary of Significant Accounting Policies," for additional information regarding the Company's allowance for uncollectible accounts.

8. INVENTORIES

Inventories consist of the following (in millions):

	September 30, 2022	September 30, 2021
Raw materials and purchased component parts	\$ 959	\$ 850
Work-in-progress	359	322
Finished goods	210	207
Total	1,528	1,379
Reserves for excess and obsolete inventory	(196)	(194)
Inventories—Net	<u>\$ 1,332</u>	<u>\$ 1,185</u>

9. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consist of the following (in millions):

	September 30, 2022	September 30, 2021
Land and improvements	\$ 103	\$ 103
Buildings and improvements	461	409
Machinery, equipment and other	945	832
Construction-in-progress	78	61
Total	1,587	1,405
Accumulated depreciation	(780)	(635)
Property, plant and equipment—Net	\$ 807	\$ 770

10. INTANGIBLE ASSETS

Other intangible assets-net in the consolidated balance sheets consist of the following at September 30 (in millions):

	2022			2021		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Trademarks & trade names	\$ 990	\$ —	\$ 990	\$ 983	\$ —	\$ 983
Technology	2,054	780	1,274	2,009	679	1,330
Order backlog	7	3	4	16	11	5
Customer relationships	580	104	476	545	78	467
Other	9	3	6	18	12	6
Total	\$ 3,640	\$ 890	\$ 2,750	\$ 3,571	\$ 780	\$ 2,791

As disclosed in Note 2, “Acquisitions and Divestitures,” the estimated fair value of the net identifiable tangible and intangible assets acquired is based on the acquisition method of accounting and is subject to adjustment upon completion of the third-party valuation for certain acquisitions. Material adjustments may occur. The fair value of the net identifiable tangible and intangible assets acquired will be finalized within the measurement period (not to exceed one year). Intangible assets acquired during the fiscal year ended September 30, 2022 are summarized in the table below (in millions):

	Gross Amount	Amortization Period
Intangible assets not subject to amortization:		
Goodwill	\$ 259	
Trademarks and trade names	26	
	285	
Intangible assets subject to amortization:		
Technology	89	20 years
Order backlog	5	1.5 years
Customer relationships	65	20 years
	159	
Total	\$ 444	

Information regarding the amortization expense of amortizable intangible assets is detailed below (in millions):

Annual Amortization Expense:

Fiscal Years Ended September 30,	
2022	\$ 136
2021	137
2020	169

Estimated Amortization Expense:

Fiscal Years Ended September 30,

2023	\$	137
2024		135
2025		134
2026		134
2027		134

The following is a summary of changes in the carrying value of goodwill by segment for the fiscal years ended September 30, 2021 and 2022 were as follows (in millions):

	Power & Control	Airframe	Non-aviation	Total
Balance at September 30, 2020	\$ 4,141	\$ 3,647	\$ 101	\$ 7,889
Goodwill acquired during the period	9	694	—	703
Goodwill divested during the period	(4)	(32)	(8)	(44)
Currency translation adjustments and other	3	17	—	20
Balance at September 30, 2021	4,149	4,326	93	8,568
Goodwill acquired during the period	57	202	—	259
Purchase price allocation adjustments ⁽¹⁾	—	3	—	3
Currency translation adjustments and other	(51)	(138)	—	(189)
Balance at September 30, 2022	<u>\$ 4,155</u>	<u>\$ 4,393</u>	<u>\$ 93</u>	<u>\$ 8,641</u>

⁽¹⁾ Primarily related to opening balance sheet adjustments recorded from the acquisition of CAC up to the expiration of the one year measurement period in January 2022.

11. ACCRUED AND OTHER CURRENT LIABILITIES

Accrued and other current liabilities consist of the following (in millions):

	September 30, 2022	September 30, 2021
Interest	\$ 170	\$ 191
Compensation and related benefits	168	167
Contract liabilities, current (Note 5)	45	25
Loss contract reserves	40	46
Dividend equivalent payments, current (Note 18)	39	46
Product warranties	26	29
Environmental and other litigation reserves (Note 15)	25	14
Current operating lease liabilities (Note 19)	18	20
Foreign currency forward exchange contracts (Note 21)	11	4
Interest rate swap agreements (Note 21)	—	100
Other	179	168
Accrued and other current liabilities	<u>\$ 721</u>	<u>\$ 810</u>

12. DEBT

The Company's debt consists of the following (in millions):

	September 30, 2022			
	Gross Amount	Debt Issuance Costs	Original Issue (Discount) or Premium	Net Amount
Short-term borrowings—trade receivable securitization facility	\$ 350	\$ —	\$ —	\$ 350
Term loans	\$ 7,298	\$ (29)	\$ (13)	\$ 7,256
8.00% senior secured notes due 2025 (“2025 Secured Notes”)	1,100	(6)	—	1,094
6.375% senior subordinated notes due 2026 (“6.375% 2026 Notes”)	950	(4)	—	946
6.875% senior subordinated notes due 2026 (“6.875% 2026 Notes”)	500	(3)	(2)	495
6.25% secured notes due 2026 (“2026 Secured Notes”)	4,400	(35)	3	4,368
7.50% senior subordinated notes due 2027 (“7.50% 2027 Notes”)	550	(3)	—	547
5.50% senior subordinated notes due 2027 (“5.50% 2027 Notes”)	2,650	(15)	—	2,635
4.625% senior subordinated notes due 2029 (“4.625% 2029 Notes”)	1,200	(9)	—	1,191
4.875% senior subordinated notes due 2029 (“4.875% 2029 Notes”)	750	(6)	—	744
Government refundable advances	23	—	—	23
Finance lease obligations	146	—	—	146
	19,567	(110)	(12)	19,445
Less: current portion	77	(1)	—	76
Long-term debt	\$ 19,490	\$ (109)	\$ (12)	\$ 19,369

	September 30, 2021			
	Gross Amount	Debt Issuance Costs	Original Issue (Discount) or Premium	Net Amount
Short-term borrowings—trade receivable securitization facility	\$ 350	\$ (1)	\$ —	\$ 349
Term loans	\$ 7,374	\$ (39)	\$ (17)	\$ 7,318
Revolving credit facility	200	—	—	200
2025 Secured Notes	1,100	(7)	—	1,093
6.375% 2026 Notes	950	(5)	—	945
6.875% 2026 Notes	500	(4)	(2)	494
2026 Secured Notes	4,400	(45)	4	4,359
7.50% 2027 Notes	550	(4)	—	546
5.50% 2027 Notes	2,650	(18)	—	2,632
4.625% 2029 Notes	1,200	(10)	—	1,190
4.875% 2029 Notes	750	(7)	—	743
Government refundable advances	29	—	—	29
Finance lease obligations	100	—	—	100
	19,803	(139)	(15)	19,649
Less: current portion	278	(1)	—	277
Long-term debt	\$ 19,525	\$ (138)	\$ (15)	\$ 19,372

Amendment No. 9 and Loan Modification Agreement – On December 29, 2021, the Company entered into Amendment No. 9 and Incremental Revolving Credit Assumption Agreement (herein, “Amendment No. 9”) to the Second Amended and Restated Credit Agreement dated as of June 4, 2014 (the “Credit Agreement”), which increases the capacity under the revolving credit facility from \$760 million to \$810 million. The terms and conditions that apply to Amendment No. 9 are the same as the terms and conditions that apply to the existing dollar revolving commitments and term loans under the Credit Agreement.

The Company capitalized \$0.2 million representing debt issuance costs associated with Amendment No. 9 during the fiscal year ended September 30, 2022.

Trade Receivable Securitization Facility

The Company's trade receivable securitization facility (the "Securitization Facility") effectively increases the Company's borrowing capacity depending on the amount of the domestic operations' trade accounts receivable. The Securitization Facility includes the right for the Company to exercise annual one year extensions as long as there have been no termination events as defined by the agreement. The Company uses the proceeds from the Securitization Facility as an alternative to other forms of debt, effectively reducing borrowing costs.

On July 25, 2022, the Company amended the Securitization Facility to, among other things, extend the maturity date to July 25, 2023 and bear interest at a rate of SOFR plus 1.30%, compared to the interest rate of LIBOR plus 1.20% that applied prior to the amendment. As of September 30, 2022, the Company has borrowed \$350 million under the Securitization Facility, which is fully drawn. At September 30, 2022, the applicable interest rate was 3.84%. The Securitization Facility is collateralized by substantially all of the Company's domestic operations' trade accounts receivable.

Government Refundable Advances

Government refundable advances consist of payments received from the Canadian government to assist in research and development related to commercial aviation. The requirement to repay this advance is based on year-over-year commercial aviation revenue growth for certain product lines at CMC Electronics, which is a wholly-owned subsidiary of TransDigm. As of September 30, 2022 and 2021, the outstanding balance of these advances were \$23 million and \$29 million, respectively.

Obligations under Finance Leases

The Company leases certain buildings and equipment under finance leases. The present value of the minimum finance lease payments, net of the current portion, represents a balance of \$146 million and \$100 million at September 30, 2022 and 2021, respectively. The increase in fiscal 2022 is attributable to certain lease renewals and amendments qualifying as lease modifications resulting in a change in classification from an operating lease to a finance lease. Refer to Note 19, "Leases," for further disclosure of the Company's lease obligations.

Senior Secured Term Loans Facility

As of September 30, 2022 and 2021, TransDigm had \$7,298 million and \$7,374 million in fully drawn term loans (the "Term Loans Facility") and \$810 million in revolving commitments, of which \$779 million and \$529 million was available to the Company as of September 30, 2022 and 2021, respectively, subject to an interest rate of 2.50% per annum. The unused portion of the revolving commitments is subject to a fee of 0.5% per annum. The increase in available revolving commitments is due to the Company's October 2021 repayment of \$200 million from a previous draw. The Term Loans Facility consists of three tranches of term loans as follows (in millions):

Term Loans Facility	Maturity Date	Interest Rate	Aggregate Principal as of September 30,	
			2022	2021
Tranche E	May 30, 2025	LIBOR plus 2.25%	\$ 2,155	\$ 2,177
Tranche F	December 9, 2025	LIBOR plus 2.25%	\$ 3,418	\$ 3,454
Tranche G	August 22, 2024	LIBOR plus 2.25%	\$ 1,725	\$ 1,743

The interest rates per annum applicable to the loans under the Credit Agreement are, at TransDigm's option, equal to either an alternate base rate or an adjusted LIBOR for one, two, three or six-month (or to the extent agreed to by each relevant lender, nine or twelve-month) interest periods chosen by TransDigm, in each case plus an applicable margin percentage. The adjusted LIBOR related to Tranche E, Tranche F and Tranche G term loans are not subject to a floor. At September 30, 2022 and 2021, the applicable interest rates for all existing tranches (which excludes the impact of our interest rate swaps and caps) were 5.92% and 2.33%, respectively, with the increase due to higher LIBOR particularly in the second half of fiscal 2022. Refer to Note 21, "Derivatives and Hedging Activities," for information about how our interest rate swaps and cap agreements are used to hedge and offset, respectively, the variable interest rates on the credit facility.

Refinancing Costs

Refinancing costs were not material in fiscal 2022. During the fiscal year ended September 30, 2021, the Company expensed refinancing costs of \$37 million, primarily representing the early redemption premium paid in connection with the repurchase of the \$1,200 million 6.50% senior subordinated notes due 2024 (the “2024 Notes”) and \$750 million 6.50% senior subordinated notes due 2025 (the “2025 Notes”), and also the execution of Amendment No. 8 and Loan Modification Agreement. During the fiscal year ended September 30, 2020, the Company expensed refinancing costs of \$28 million primarily representing the early redemption premium paid in connection with the repurchase of the \$1,150 million 6.00% senior subordinated notes due 2022 (the “2022 Notes”), and also the execution of Amendment No. 7 and the Refinancing Facility Agreement.

Secured Notes

TransDigm Inc.’s 2025 Secured Notes and 2026 Secured Notes (collectively, the “Secured Notes”) jointly and severally guaranteed, on a senior basis, by TD Group, TransDigm UK and all of TransDigm Inc.’s Domestic Restricted Subsidiaries, as defined in the applicable Indentures. The Secured Notes contain many of the restrictive covenants included in the Credit Agreement. TransDigm is in compliance with all the covenants contained in the Secured Notes.

Subordinated Notes

TransDigm Inc.’s 6.375% 2026 Notes, 7.50% 2027 Notes, 5.50% 2027 Notes, 4.625% 2029 Notes, and 4.875% 2029 Notes (collectively, the “TransDigm Inc. Notes”) are jointly and severally guaranteed, on a senior subordinated basis, by TD Group, TransDigm UK and all of TransDigm Inc.’s Domestic Restricted Subsidiaries, as defined in the applicable Indenture. TransDigm UK’s 6.875% 2026 Notes (along with the TransDigm Inc. Notes are referred to collectively as the “Notes”) are jointly and severally guaranteed, on a senior subordinated basis, by TD Group, TransDigm Inc. and all of TransDigm Inc.’s Domestic Restricted Subsidiaries, as defined in the applicable Indenture. The Notes contain many of the restrictive covenants included in the Credit Agreement. TransDigm is in compliance with all the covenants contained in the Notes.

Debt Repayment Schedule

At September 30, 2022, future maturities of long-term debt (including finance leases) are as follows (in millions):

Fiscal Years Ended September 30,		
2023	\$	77
2024		1,770
2025		2,150
2026		10,269
2027		557
Thereafter		4,744
Total	\$	19,567

13. RETIREMENT PLANS

The Company maintains certain non-contributory defined benefit pension plans (collectively, referred to as the “pension plans”) covering eligible employees in the U.S. and in other certain countries such as Canada, France, Germany and the United Kingdom. These defined benefit plans generally provide benefits to employees based on formulas recognizing length of service and earnings. The Company’s funding policy is to contribute actuarial-determined amounts allowable under tax and statutory regulations for the qualified plans. The Company uses a September 30th measurement date for its defined benefit pension plans. The Company also sponsors other post-retirement pension plans for its employees in the U.S. and in Canada (collectively, referred to as the “post-retirement pension plans”). Other post-retirement pension plans are non-contributory health care and life insurance plans.

Net periodic pension benefit cost (income) for the pension plans at the end of each fiscal year consisted of the following (in millions):

	Defined Benefit Pension Plans					
	2022		2021		2020	
	U.S. Pension Plans	Non-U.S. Pension Plans	U.S. Pension Plans	Non-U.S. Pension Plans	U.S. Pension Plans	Non-U.S. Pension Plans
Service cost	\$ —	\$ 3	\$ 2	\$ 5	\$ 9	\$ 6
Interest cost	4	4	6	5	10	5
Expected return on plan assets	(6)	(7)	(19)	(7)	(19)	(8)
Amortization of net loss	—	1	1	2	1	1
Curtailement/settlements loss (gain) ⁽¹⁾	22	—	—	(2)	(1)	(1)
Net periodic pension benefit cost (income)	\$ 20	\$ 1	\$ (10)	\$ 3	\$ —	\$ 3

⁽¹⁾ Effective June 30, 2021, the Company terminated the Esterline Technologies Retirement Plan (the “ERP”) in accordance with IRS regulations. Pension obligations were distributed through a combination of lump sum payments to eligible plan participants and the purchase of a group annuity contract. Approximately \$107 million in lump sum payments (using existing plan assets) were made during the fiscal year ended September 30, 2022. During the third quarter of fiscal 2022, the Company transferred the remaining benefit obligations of approximately \$188 million to an insurance company in order to purchase a group annuity contract which began paying plan benefits in September 2022. The Company made a final cash contribution of approximately \$16 million during the third quarter of fiscal 2022 as part of the group annuity purchase. A settlement charge of approximately \$22 million, which included \$6 million in unrecognized actuarial losses previously recorded as a component of accumulated other comprehensive loss, net of tax, was recorded as a component of other expense (income) in the consolidated statements of income in fiscal 2022.

Net periodic pension benefit cost for the post-retirement pension plans was less than \$1 million for each of the fiscal years ended 2022, 2021 and 2020. The components of net periodic pension benefit cost other than service cost are included in other expense (income) in the consolidated statements of income.

The changes in benefit obligations and plan assets, funded status and amounts recognized in the consolidated balance sheets and accumulated other comprehensive income for defined benefit pension and post-retirement plans at September 30, 2022 and 2021, were as follows (in millions):

	Defined Benefit Pension Plans				Post-Retirement Pension Plans			
	September 30, 2022		September 30, 2021		September 30, 2022		September 30, 2021	
	U.S. Pension Plans	Non-U.S. Pension Plans	U.S. Pension Plans	Non-U.S. Pension Plans	U.S. Pension Plans	Non-U.S. Pension Plans	U.S. Pension Plans	Non-U.S. Pension Plans
Benefit Obligations								
Beginning balance	\$ 351	\$ 224	\$ 366	\$ 248	\$ 2	\$ 12	\$ 1	\$ 14
Currency translation adjustment	—	(21)	—	10	—	(1)	—	1
Service cost	—	3	2	5	—	—	—	1
Interest cost	4	4	6	5	—	—	—	—
Plan participant contributions	—	—	—	1	—	—	—	—
Actuarial gain	(30)	(53)	—	(11)	—	(2)	—	(3)
Curtailments	—	—	—	(4)	—	—	—	—
Settlements	(295)	—	(8)	(1)	—	—	—	—
Divestitures	—	—	—	(20)	—	—	—	—
Other adjustments	—	—	1	—	—	—	1	—
Benefits paid	(15)	(9)	(16)	(9)	—	(1)	—	(1)
Ending balance	\$ 15	\$ 148	\$ 351	\$ 224	\$ 2	\$ 8	\$ 2	\$ 12
Plan Assets - Fair Value								
Beginning balance	\$ 341	\$ 206	\$ 342	\$ 204	\$ —	\$ —	\$ —	\$ —
Currency translation adjustment	—	(18)	—	9	—	—	—	—
Realized and unrealized (loss) gain on plan assets	(39)	(49)	22	14	—	—	—	—
Plan participant contributions	—	—	—	1	—	—	—	—
Company contributions	17	3	—	8	—	1	—	1
Settlements	(295)	—	(8)	(1)	—	—	—	—
Divestitures	—	—	—	(20)	—	—	—	—
Other adjustments	—	—	1	—	—	—	—	—
Benefits paid	(15)	(9)	(16)	(9)	—	(1)	—	(1)
Ending balance	\$ 9	\$ 133	\$ 341	\$ 206	\$ —	\$ —	\$ —	\$ —
Funded Status								
Fair value of plan assets	\$ 9	\$ 133	\$ 341	\$ 206	\$ —	\$ —	\$ —	\$ —
Benefit obligations	(15)	(148)	(351)	(224)	(2)	(8)	(2)	(12)
Net amount recognized	\$ (6)	\$ (15)	\$ (10)	\$ (18)	\$ (2)	\$ (8)	\$ (2)	\$ (12)
Amount Recognized on Consolidated Balance Sheets								
Other assets	\$ —	\$ 6	\$ —	\$ 6	\$ —	\$ —	\$ —	\$ —
Accrued and other current liabilities	(1)	(1)	(3)	—	—	(1)	—	(1)
Other non-current liabilities	(5)	(20)	(7)	(24)	(2)	(7)	(2)	(11)
Net amount recognized	\$ (6)	\$ (15)	\$ (10)	\$ (18)	\$ (2)	\$ (8)	\$ (2)	\$ (12)
Amounts Recognized in Accumulated Other Comprehensive Loss (Income)								
Net loss (gain)	\$ 3	\$ 12	\$ 10	\$ 14	\$ (1)	\$ (4)	\$ (1)	\$ (2)
Prior service cost	—	2	1	1	1	—	1	—
Ending balance	\$ 3	\$ 14	\$ 11	\$ 15	\$ —	\$ (4)	\$ —	\$ (2)

The accumulated benefit obligation for all pension plans was \$157.8 million and \$567.8 million as of September 30, 2022 and September 30, 2021, respectively. The decrease to the accumulated benefit obligation during the current year primarily relates to the settlement of the ERP.

Estimated future benefit payments expected to be paid from the pension and post-retirement pension plans or from the Company's assets are as follows (in millions):

Fiscal Years Ended September 30,

2023	\$	12
2024		12
2025		12
2026		12
2027		13
2028 - 2032		66

There is an expected funding requirement of \$2.1 million in fiscal 2023 for the non-U.S. pension plans maintained by the Company. There is no expected funding requirement in fiscal 2023 for the U.S. pension plans.

<i>Principal assumptions as of year end</i>	U.S. Defined Benefit Pension Plans		Non-U.S. Defined Benefit Pension Plans	
	2022	2021	2022	2021
Discount rate	4.29%	2.56%	4.90%	2.40%
Rate of increase in future compensation levels	N/A ⁽¹⁾	N/A ⁽¹⁾	3.38%	3.06%
Assumed long-term rate of return on plan assets	2.64%	5.74%	3.55%	3.20%

⁽¹⁾ As a result of the plan freeze to the ERP for all future benefit accruals and participation by new or rehired employees on or after January 1, 2021, the assumed rate of increase in future compensation levels was not applicable as of September 30, 2022 and 2021, as pay increases are not valued once a defined benefit pension plan is frozen. The ERP settlement occurred in fiscal 2022.

<i>Principal assumptions as of year end</i>	U.S. Post-Retirement Pension Plans		Non-U.S. Post-Retirement Pension Plans	
	2022	2021	2022	2021
Discount rate	3.94%	2.36%	5.06%	2.87%
Initial weighted average health care trend rate	6.00%	7.30%	5.60%	5.70%
Ultimate weighted average health care trend rate	6.00%	6.00%	4.20%	4.20%

The Company uses discount rates developed from a yield curve established from high-quality corporate bonds and matched to plan-specific projected benefit payments. Although future changes to the discount rate are unknown, had the discount rate increased or decreased by 25 basis points, pension liabilities in total would have decreased \$1.1 million or increased \$8.4 million, respectively. Had the discount rate increased or decreased by 25 basis points, fiscal 2022 net periodic benefit cost for the pension plans would have increased \$1.8 million or \$2.1 million, respectively. In determining the expected long-term rate of return on the defined benefit pension plans' assets, the Company considers the historical rates of return, the nature of investments, the asset allocation, and expectations of future investment strategies. Had the expected return on assets increased or decreased by 25 basis points, fiscal 2022 net periodic benefit cost would have increased \$1.4 million or \$2.5 million, respectively. Management is not aware of any legislative or other initiatives or circumstances that will significantly impact the Company's pension obligations in fiscal 2023.

Plan assets are invested in a diversified portfolio of equity and debt securities consisting primarily of common stocks, bonds and government securities. The objective of these investments is to maintain sufficient liquidity to fund current benefit payments and achieve targeted risk-adjusted returns. Management periodically reviews allocations of plan assets by investment type and evaluates external sources of information regarding the long-term historical returns and expected future returns for each investment type.

Allocations by investment type are as follows:

<i>Plan assets allocation as of fiscal year end:</i>	Target	Actual	
		2022	2021
Return-seeking assets (e.g., equity securities and real estate)	35%-70%	42.0%	20.7%
Fixed-income securities (e.g., debt securities)	30%- 65%	57.6%	78.3%
Cash	—%	0.4%	1.0%
Total		100.0%	100.0%

Due to the freeze and subsequent termination of the ERP that occurred during fiscal 2021, management approved changes to the Plan's investment policy to align our pension plan assets with our projected benefit obligation to reduce volatility by targeting an investment strategy of approximately 85% to 95% in fixed-income securities and up to approximately 20% in return-seeking assets, consisting of primarily equity securities and real estate. Once the settlement of the ERP occurred, the targets were revised to be in line with those used prior to the termination of the ERP.

The following table presents the fair value of the Company's pension plan assets as of September 30, 2022, by asset category segregated by level within the fair value hierarchy, as described in Note 20, "Fair Value Measurements" (in millions):

	Fair Value Hierarchy		
	Level 1	Level 2	Total
<i>Investments measured at fair value by category:</i> ⁽⁵⁾			
Return-seeking assets: ⁽¹⁾			
U.S. equity securities	\$ 4	\$ —	\$ 4
Non-U.S. equity securities	21	—	21
Fixed-income securities: ⁽²⁾			
Non-U.S. foreign commercial and government bonds	—	41	41
Cash and cash equivalents ⁽³⁾	1	—	1
	\$ 26	\$ 41	\$ 67
<i>Investments measured at net asset value by category:</i> ⁽⁴⁾			
Return-seeking assets: ⁽¹⁾			
Commingled trust funds - Non-U.S. securities			27
Non-U.S. equity securities			7
Fixed-income securities: ⁽²⁾			
U.S. corporate bonds			2
Non-U.S. corporate bonds			18
Non-U.S. foreign commercial and government bonds			21
Total			\$ 142

The following table presents the fair value of the Company’s pension plan assets as of September 30, 2021, by asset category segregated by level within the fair value hierarchy, as described in Note 20, “Fair Value Measurements” (in millions):

	Fair Value Hierarchy		
	Level 1	Level 2	Total
<i>Investments measured at fair value by category:</i> ⁽⁵⁾			
Return-seeking assets: ⁽¹⁾			
U.S. equity securities	\$ 6	\$ —	\$ 6
Non-U.S. equity securities	34	—	34
Fixed-income securities: ⁽²⁾			
Non-U.S. foreign commercial and government bonds	—	53	53
Cash and cash equivalents ⁽³⁾	5	—	5
	\$ 45	\$ 53	\$ 98
<i>Investments measured at net asset value by category:</i> ⁽⁴⁾			
Return-seeking assets: ⁽¹⁾			
Commingled trust funds - Non-U.S. securities			65
Non-U.S. equity securities			9
Fixed-income securities: ⁽²⁾			
U.S. government bonds and securities			91
U.S. corporate bonds			223
Non-U.S. corporate bonds			20
Non-U.S. foreign commercial and government bonds			41
Total			\$ 547

⁽¹⁾ Level 1 return-seeking assets, which are primarily equity securities and real estate, are actively traded on U.S. and non-U.S. exchanges and are either valued using the market approach at quoted market prices on the measurement date or at the net asset value of the shares held by the plan on the measurement date based on quoted market prices.

⁽²⁾ Level 2 fixed-income securities, which are primarily debt securities, are primarily valued using the market approach at either quoted market prices, pricing models that use observable market data, or bids provided by independent investment brokerage firms.

⁽³⁾ Cash and cash equivalents include cash which is used to pay benefits and cash invested in a short-term investment fund that holds securities with values based on quoted market prices, but for which the funds are not valued on quoted market basis.

⁽⁴⁾ These investments are valued at the net asset value (“NAV”) of units held. The NAV is used to estimate fair value and is based on the fair value of the underlying investments held by the fund less its liability.

⁽⁵⁾ No investments measured using Level 3 inputs.

Defined Contribution Plans

The Company sponsors certain defined contribution employee savings plans that cover substantially all of the Company’s U.S. employees. Under certain plans, the Company contributes a percentage of employee compensation and matches a portion of employee contributions. The cost recognized for such contributions for the fiscal years ended September 30, 2022, 2021 and 2020 was approximately \$30.2 million, \$28.3 million and \$25.3 million, respectively.

14. INCOME TAXES

The Company’s income from continuing operations before income taxes includes the following components for the periods shown below (in millions):

	Fiscal Years Ended September 30,		
	2022	2021	2020
United States	\$ 882	\$ 516	\$ 635
Foreign	245	199	105
	\$ 1,127	\$ 715	\$ 740

The Company's income tax provision (benefit) on income from continuing operations consists of the following for the periods shown below (in millions):

	Fiscal Years Ended September 30,		
	2022	2021	2020
Current			
Federal	\$ 194	\$ (21)	\$ 26
State	27	14	3
Foreign	62	7	34
	<u>283</u>	<u>—</u>	<u>63</u>
Deferred			
Federal	(17)	7	29
State	(8)	(2)	3
Foreign	3	29	(8)
	<u>(22)</u>	<u>34</u>	<u>24</u>
	<u>\$ 261</u>	<u>\$ 34</u>	<u>\$ 87</u>

A reconciliation of the federal statutory income tax rate to the effective income tax rate for the periods shown below is as follows:

	Fiscal Years Ended September 30,		
	2022	2021	2020
Federal statutory income tax rate	21.0 %	21.0 %	21.0 %
Changes in valuation allowances impacting results ⁽¹⁾	5.5 %	(8.2)%	4.2 %
Federal deemed inclusion amounts	1.5 %	1.7 %	0.4 %
Withholding taxes	1.2 %	0.2 %	0.3 %
Gain on sale of businesses	(0.1)%	1.4 %	— %
Resolution and settlements to uncertain tax positions	(0.1)%	(3.2)%	(0.3)%
Research and development credits	(0.6)%	(1.2)%	(0.6)%
Foreign tax credits	(0.8)%	(1.2)%	(0.6)%
Provision to return adjustments	(1.0)%	2.2 %	(0.4)%
Foreign-derived intangible income	(2.0)%	(1.5)%	(2.8)%
Stock-based compensation	(2.8)%	(8.7)%	(10.7)%
Remeasurement of deferred tax assets and liabilities related to enacted statutory rate changes	— %	2.1 %	0.4 %
Other—net	1.4 %	0.2 %	0.9 %
Effective income tax rate	<u>23.2 %</u>	<u>4.8 %</u>	<u>11.8 %</u>

⁽¹⁾ Primarily relates to the Company's business interest expense limitation pursuant to IRC §163(j) as modified by the Tax Cuts and Jobs Act. Such provision, as modified, was effective for the Company beginning in fiscal 2019. In general, the deduction for interest expense is limited to 30% (50% as modified by the CARES Act for the Company's fiscal 2020 and 2021) of the sum of the Company's adjusted taxable income ("ATI") and its business interest income. Interest expense disallowed by such limitation, in a taxable year, may be carried forward indefinitely. Based upon available evidence, a valuation allowance is recorded for the resulting carryforward to reflect the Company's belief that it is more likely than not that such deferred tax assets will not be realized. In fiscal 2021, the Company made a tax election on its U.S. federal income tax return allowing for the utilization of its net interest limitation carryforward. The Company recognized approximately \$69.0 million of benefit from the release of the valuation allowance, applicable to such carryforward, for the fiscal year ended September 30, 2021.

The components of the deferred taxes consist of the following (in millions):

	September 30, 2022	September 30, 2021
Deferred tax assets (liabilities):		
Intangible assets	\$ (832)	\$ (814)
Interest rate swaps and caps	(42)	69
Property, plant and equipment	(23)	(32)
Employee benefits	108	107
Interest expense limitation	87	28
Inventories	61	45
Net operating losses	52	58
Loss contract reserves	41	51
U.S. income tax credits	27	31
Capitalized research and development costs	24	—
Non-U.S. income tax credits	14	20
Environmental reserves	11	11
Product warranty reserves	6	7
Other	7	8
Total	(459)	(411)
Add: Valuation allowance	(137)	(74)
Total net deferred tax assets (liabilities)	<u>\$ (596)</u>	<u>\$ (485)</u>

At September 30, 2022, the Company has state net operating loss carryforwards of approximately \$1,679.7 million, German net operating loss carryforwards of \$28.1 million and United Kingdom net operating loss carryforwards of approximately \$26.6 million that expire in various fiscal years from 2023 to 2041. The Company has U.S. and non-U.S. tax credit carryforwards of \$41.6 million that expire beginning in fiscal year 2025.

The deferred tax assets for the interest expense limitation, net operating losses, and tax credit carryforwards are reduced by a valuation allowance for the amount of such assets that the Company believes will not be realized.

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction and various state, local and foreign jurisdictions. The Company is no longer subject to U.S. federal examinations for years before fiscal 2017. The Company is currently under examination for its federal income taxes in Canada for fiscal years 2013 through 2019, and in Germany for fiscal years 2014 through 2017. In addition, the Company is subject to state income tax examinations for fiscal years 2015 and later.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	2022	2021
Balance at October 1	\$ 19	\$ 41
Additions based on tax positions related to the prior year	3	—
Additions based on tax positions related to the current year	—	2
Reductions based on tax positions related to the prior year	(1)	(18)
Settlement with tax authorities	(1)	(4)
Lapse in statute of limitations	(3)	(2)
Balance at September 30	<u>\$ 17</u>	<u>\$ 19</u>

Unrecognized tax benefits at September 30, 2022 and 2021, the recognition of which would have an effect on the effective tax rate for each fiscal year, amounted to \$16.6 million and \$19.1 million, respectively. The Company classifies all income tax-related interest and penalties as income tax expense, which were not significant for the years ended September 30, 2022 and 2021. As of September 30, 2022 and 2021, the Company accrued \$4.5 million and \$4.9 million, respectively, for the potential payment of interest and penalties. Within the next 12 months, the Company does not anticipate a material increase, or decrease, in the amount of unrecognized tax benefits.

15. COMMITMENTS AND CONTINGENCIES

During the ordinary course of business, the Company is from time to time threatened with, or may become a party to, legal actions and other proceedings. While the Company is currently involved in certain legal proceedings, it believes the results of these proceedings will not have a material adverse effect on its financial condition, results of operations, or cash flows.

Litigation Claims – On November 1, 2021, a purported stockholder of the Company filed a derivative complaint, captioned *Sciabacucchi v Howley, et al.* C.A. No. 2021-0938-LWW (the “Derivative Action”), in the Delaware Court of Chancery (the “Court”). The complaint, which names certain directors of the Company (the “Director Defendants”) as defendants, alleges that the Director Defendants awarded and received excessive compensation. The Director Defendants have denied, and continue to deny, any and all allegations of wrongdoing or liability asserted in the Derivative Action.

Nonetheless, solely to eliminate the uncertainty, distraction, disruption, burden, risk and expense of further litigation, the Company and the Director Defendants entered into a Stipulation and Agreement of Compromise, Settlement and Release (the “Stipulation”) with the plaintiff on August 19, 2022. Pursuant to the terms of the Stipulation, the Director Defendants have agreed to implement and maintain certain changes to the Company’s compensation policies and practices such as to the extent dividend equivalent payments are declared payable to any Company director, those DEPs will not be paid in cash, but instead will be paid via a reduction to the strike price of options that are issued to that director. Other corporate governance enhancements were also agreed to by the Company. The Company is also responsible for the payment of plaintiff’s attorneys’ fees. The proposed settlement as set forth in the Stipulation, other than the amount of the attorneys’ fees, was approved by the Court on November 10, 2022. The settlement (i) fully resolves the Derivative Action by dismissing all asserted claims with prejudice and (ii) releases all claims related to the allegations in the Derivative Action. The settlement is not expected to have a material adverse impact on the Company’s financial statements.

DOD OIG Audit – TransDigm’s subsidiaries are periodically subject to pricing reviews and government buying agencies that purchase some of our subsidiaries’ products are periodically subject to audits by the Department of Defense (“DOD”) Office of Inspector General (“OIG”) with respect to prices paid for such products. In 2019, the DOD OIG received a congressional letter requesting a comprehensive review of TransDigm’s contracts with the DOD from January 2017 through June 2019 to identify whether TransDigm earned excess profits. This subsequently resulted in an audit by the DOD OIG in which the objective was to determine whether TransDigm’s business model impacted the DOD’s ability to pay fair and reasonable prices for spare parts. In December 2021, the OIG completed the audit and issued the related audit report. Despite the audit report making clear there was no wrongdoing by TransDigm, its businesses, or the DOD, the report recommended that TransDigm voluntarily refund at least \$20.8 million in excess profit on 150 contracts subject to the audit.

TransDigm disagrees with many of the implications contained in the report, and objects to the use of arbitrary standards and analysis which render many areas of the report inaccurate and misleading. These include: (1) The report expressly acknowledges that it used arbitrary standards that are not applicable to the audited contracts and warns that its arbitrary standards should not be used in the future. The use of inapplicable standards results in flawed analysis and is misleading; (2) The report ignores significant real costs incurred by the business and contrary to law reports these costs as excess profit; (3) Despite data demonstrating that the DOD paid lower prices compared to the commercial prices for similar parts, the report did not conduct a price analysis and instead implies that the DOD negotiated prices were too high.

No loss contingency related to the voluntary refund request has been recorded as of September 30, 2022 as the Company has concluded that based on the current facts and circumstances, it’s uncertain as to whether or not the requested voluntary refund will be made.

Environmental Liabilities – Our operations and facilities are subject to a number of federal, state, local and foreign environmental laws and regulations that govern, among other things, discharges of pollutants into the air and water, the generation, handling, storage and disposal of hazardous materials and wastes, the remediation of contamination and the health and safety of our employees. Environmental laws and regulations may require that the Company investigate and remediate the effects of the release or disposal of materials at sites associated with past and present operations. Certain facilities and third-party sites utilized by the Company have been identified as potentially responsible parties under the federal superfund laws and comparable state laws. The Company is currently involved in the investigation and remediation of a number of sites under applicable laws.

Estimates of the Company’s environmental liabilities are based on current facts, laws, regulations and technology. These estimates take into consideration the Company’s prior experience and professional judgment of the Company’s environmental advisors. Estimates of the Company’s environmental liabilities are further subject to uncertainties regarding the nature and extent of site contamination, the range of remediation alternatives available, evolving remediation standards, imprecise engineering evaluations and cost estimates, the extent of corrective actions that may be required and the number and financial condition of other potentially responsible parties, as well as the extent of their responsibility for the remediation.

Accordingly, as investigation and remediation proceed, it is likely that adjustments in the Company's accruals will be necessary to reflect new information. The amounts of any such adjustments could have a material adverse effect on the Company's results of operations or cash flows in a given period. Based on currently available information, however, the Company does not believe that future environmental costs in excess of those accrued with respect to sites for which the Company has been identified as a potentially responsible party are likely to have a material adverse effect on the Company's financial condition or results of operations.

Environmental liabilities are recorded when the liability is probable and the costs are reasonably estimable, which generally is not later than at completion of a feasibility study or when the Company has recommended a remedy or has committed to an appropriate plan of action. The Company also takes into consideration the estimated period of time in which payments will be required. The liabilities are reviewed periodically and, as investigation and remediation proceed, adjustments are made as necessary. Liabilities for losses from environmental remediation obligations do not consider the effects of inflation and anticipated expenditures are not discounted to their present value. The liabilities are not offset by possible recoveries from insurance carriers or other third parties, but do reflect anticipated allocations among potentially responsible parties at federal superfund sites or similar state-managed sites, third party indemnity obligations, and an assessment of the likelihood that such parties will fulfill their obligations at such sites.

The Company's consolidated balance sheets includes current environmental remediation obligations at September 30, 2022 and 2021 of \$7.9 million and \$8.2 million classified as a component of accrued and other current liabilities, respectively, and non-current environmental remediation obligations at September 30, 2022 and 2021 of \$38.3 million and \$40.7 million classified as a component of other non-current liabilities, respectively.

Leach International Europe (Facility Fire) – On August 8, 2019, a fire caused significant damage to the Niort, France operating facility of the Leach International Europe subsidiary, which is reported within the Company's Power & Control segment. The facility as well as certain machinery, equipment and inventory sustained damage. The Company suspended operations at the Niort facility as a result of the fire; however, had transferred certain operations to temporary facilities until operations were fully restored at the rebuilt facility. The new facility was completed in December 2020 and was fully operational as of March 2021.

The Company's insurance covers damage to the facility, equipment, inventory, and other assets, at replacement cost, as well as business interruption losses and other incremental costs resulting from the disruption of operations caused by the fire, subject to a \$1 million deductible and certain sub-limits based on the nature of the covered item. Anticipated insurance recoveries related to losses and incremental costs incurred were recognized when receipt was probable. Anticipated insurance recoveries in excess of net book value of the damaged property and inventory were recorded once all contingencies relating to the claim had been resolved.

During fiscal 2021, the insurance claim, inclusive of property, business interruption and incremental costs of working, was settled for \$88 million, net of the \$1 million deductible. A gain of \$24 million was recorded to other income during fiscal 2021, of which \$19 million represents the insurance proceeds received in excess of the carrying value of the damaged fixed assets and inventory and \$5 million represents the insurance proceeds received in excess of previously recorded receivables for business interruption and incremental costs of working.

Of the approximately \$58 million in cash proceeds received in fiscal 2021 relating to the insurance claim and final settlement of the claim, \$24 million was included in net cash used in investing activities and \$34 million was included in net cash provided by operating activities within the consolidated statements of cash flows based on the nature of the insurance reimbursements. In fiscal 2020, approximately \$28 million in cash proceeds was received as an initial advance under the property insurance claim. All of the proceeds received in fiscal 2020 were included in net cash provided by operating activities within the consolidated statements of cash flows based on the nature of the insurance reimbursements.

16. STOCK REPURCHASE PROGRAM

TD Group consists of 224,400,000 shares of \$.01 par value common stock and 149,600,000 shares of \$.01 par value preferred stock. The total number of shares of common stock issued at September 30, 2022 and 2021 was 60,049,685 and 59,403,100, respectively. The total number of shares held in treasury at September 30, 2022 and 2021 was 5,688,639 and 4,198,226, respectively. There were no shares of preferred stock outstanding at September 30, 2022 and 2021. The terms of the preferred stock have not been established.

Occasionally at management's discretion, the Company repurchases its common stock in the open market, depending on market conditions, stock price and other factors. On November 8, 2017, the Board of Directors of the Company (the "Board"), authorized a stock repurchase program to permit repurchases of its outstanding common stock not to exceed \$650 million in the aggregate (the "\$650 million stock repurchase program"), subject to any restrictions specified in the Company's Credit Agreement and/or Indentures governing the Company's existing Notes.

During fiscal 2020, the Company repurchased 36,900 shares of common stock at an average price of \$512.67 per share, for a total amount of \$19 million. The repurchased shares of common stock are classified as treasury stock in the statement of changes in stockholders' deficit. No repurchases were made during the fiscal year ended September 30, 2021. The \$650 million stock repurchase program was effective through January 26, 2022.

On January 27, 2022, the Board authorized a new stock repurchase program to permit repurchases of its outstanding common stock not to exceed \$2,200 million in the aggregate (the "\$2,200 million stock repurchase program"), replacing the \$650 million stock repurchase program previously authorized by the Board on November 8, 2017, subject to any restrictions specified in the Credit Agreement, and/or Indentures governing the Company's existing Notes. There is no expiration date for this program.

During fiscal 2022, the Company repurchased 1,490,413 shares of common stock at an average price of \$612.13 per share, for a total amount of \$912 million. The repurchased shares of common stock are classified as treasury stock in the statement of changes in stockholders' deficit. As of September 30, 2022, \$1,288 million remains available for repurchase under the \$2,200 million stock repurchase program.

17. SEGMENTS

The Company's businesses are organized and managed in three reporting segments: Power & Control, Airframe and Non-aviation.

The Power & Control segment includes operations that primarily develop, produce and market systems and components that predominately provide power to or control power of the aircraft utilizing electronic, fluid, power and mechanical motion control technologies. Major product offerings include mechanical/electro-mechanical actuators and controls, ignition systems and engine technology, specialized pumps and valves, power conditioning devices, specialized AC/DC electric motors and generators, batteries and chargers, databus and power controls, advanced sensor products, switches and relay panels, high performance hoists, winches and lifting devices, and cargo loading, handling and delivery systems. Primary customers of this segment are engine and power system and subsystem suppliers, airlines, third party maintenance suppliers, military buying agencies and repair depots. Products are sold in the original equipment and aftermarket market channels.

The Airframe segment includes operations that primarily develop, produce and market systems and components that are used in non-power airframe applications utilizing airframe and cabin structure technologies. Major product offerings include engineered latching and locking devices, engineered rods, engineered connectors and elastomer sealing solutions, cockpit security components and systems, specialized and advanced cockpit displays, engineered audio, radio and antenna systems, specialized lavatory components, seat belts and safety restraints, engineered and customized interior surfaces and related components, thermal protection and insulation, lighting and control technology and parachutes. Primary customers of this segment are airframe manufacturers and cabin system suppliers and subsystem suppliers, airlines, third party maintenance suppliers, military buying agencies and repair depots. Products are sold in the original equipment and aftermarket market channels.

The Non-aviation segment includes operations that primarily develop, produce and market products for non-aviation markets. Major product offerings include seat belts and safety restraints for ground transportation applications, mechanical/electro-mechanical actuators and controls for space applications, hydraulic/electromechanical actuators and fuel valves for land-based gas turbines, and refueling systems for heavy equipment used in mining, construction and other industries and turbine controls for the energy and oil and gas markets. Primary customers of this segment are off-road vehicle suppliers and subsystem suppliers, child restraint system suppliers, satellite and space system suppliers, manufacturers of heavy equipment used in mining, construction and other industries and turbine original equipment manufacturers, gas pipeline builders and electric utilities.

The primary measurement used by management to review and assess the operating performance of each segment is EBITDA As Defined. The Company defines EBITDA As Defined as earnings before interest, taxes, depreciation and amortization plus certain non-operating items recorded as corporate expenses including non-cash compensation charges incurred in connection with the Company's stock incentive or deferred compensation plans, restructuring costs related to the Company's cost reduction measures in response to the COVID-19 pandemic, foreign currency gains and losses, acquisition-integration costs, acquisition and divestiture transaction-related expenses, and refinancing costs. COVID-19 restructuring costs represented actions primarily taken by the Company in fiscal 2021 and 2020 to reduce its workforce to align with customer demand, as well as incremental costs related to the pandemic that are not expected to recur once the pandemic has subsided and are clearly separable from normal operations (e.g., additional cleaning and disinfecting of facilities by contractors above and beyond normal requirements, personal protective equipment). Acquisition and divestiture-related costs represent accounting adjustments to inventory associated with acquisitions of businesses and product lines that were charged to cost of sales when the inventory was sold; costs incurred to integrate acquired businesses and product lines into the Company's operations, facility relocation costs and other acquisition-related costs; transaction-related costs for both acquisitions and divestitures comprising deal fees; legal, financial and tax diligence expenses and valuation costs that are required to be expensed as incurred and other acquisition accounting adjustments.

EBITDA As Defined is not a measurement of financial performance under U.S. GAAP. Although the Company uses EBITDA As Defined to assess the performance of its business and for various other purposes, the use of this non-GAAP financial measure as an analytical tool has limitations, and it should not be considered in isolation or as a substitute for analysis of the Company's results of operations as reported in accordance with U.S. GAAP.

The Company's segments are reported on the same basis used internally for evaluating performance and for allocating resources. The accounting policies for each segment are the same as those described in the summary of significant accounting policies in the Company's consolidated financial statements. Intersegment sales and transfers are recorded at values based on market prices, which creates intercompany profit on intersegment sales or transfers that is eliminated in consolidation. Intersegment sales were immaterial for the periods presented below. Corporate consists of our corporate offices. Corporate expenses consist primarily of compensation, benefits, professional services and other administrative costs incurred by the corporate offices. Corporate assets consist primarily of cash and cash equivalents. Corporate expenses and assets reconcile reportable segment data to the consolidated totals. An immaterial amount of corporate expenses is allocated to the operating segments.

The following table presents net sales by reportable segment (in millions):

	Fiscal Years Ended September 30,		
	2022	2021	2020
Net sales to external customers			
Power & Control			
Commercial and non-aerospace OEM	\$ 602	\$ 524	\$ 623
Commercial and non-aerospace aftermarket	846	573	673
Defense	1,425	1,453	1,399
Total Power & Control	2,873	2,550	2,695
Airframe			
Commercial and non-aerospace OEM	726	582	783
Commercial and non-aerospace aftermarket	779	553	689
Defense	886	948	781
Total Airframe	2,391	2,083	2,253
Total Non-aviation	165	165	155
Net Sales	\$ 5,429	\$ 4,798	\$ 5,103

The following table reconciles EBITDA As Defined by segment to consolidated income from continuing operations before income taxes (in millions):

	Fiscal Years Ended September 30,		
	2022	2021	2020
EBITDA As Defined			
Power & Control	\$ 1,531	\$ 1,319	\$ 1,345
Airframe	1,121	878	955
Non-aviation	65	62	54
Total segment EBITDA As Defined	2,717	2,259	2,354
Less: Unallocated corporate expenses	71	70	76
Total Company EBITDA As Defined	2,646	2,189	2,278
Depreciation and amortization expense	253	253	283
Interest expense, net	1,076	1,059	1,029
Acquisition and divestiture transaction-related expenses	18	35	31
Non-cash stock and deferred compensation expense	184	130	93
Refinancing costs	1	37	28
COVID-19 pandemic restructuring costs	—	40	54
Gain on sale of businesses, net	(7)	(69)	—
Other, net	(6)	(11)	20
Income from continuing operations before income taxes	\$ 1,127	\$ 715	\$ 740

The following table presents capital expenditures and depreciation and amortization by segment (in millions):

	Fiscal Years Ended September 30,		
	2022	2021	2020
Capital expenditures			
Power & Control	\$ 63	\$ 65	\$ 89
Airframe	52	37	10
Non-aviation	3	2	4
Corporate	1	1	2
	\$ 119	\$ 105	\$ 105
Depreciation and amortization			
Power & Control	\$ 109	\$ 107	\$ 117
Airframe	138	139	157
Non-aviation	5	6	7
Corporate	1	1	2
	\$ 253	\$ 253	\$ 283

The following table presents total assets by segment (in millions):

	September 30, 2022	September 30, 2021
Total assets		
Power & Control	\$ 6,994	\$ 6,980
Airframe	7,781	7,472
Non-aviation	238	229
Corporate	3,094	4,634
	\$ 18,107	\$ 19,315

Geographic Area Information

Net sales are measured based on the geographic destination of sales. Long-lived assets consist of property, plant and equipment - net and operating lease right-of-use assets. Net sales and long-lived assets of individual countries outside of the United States are not material.

The following table presents net sales by geographic area (in millions):

	Fiscal Years Ended September 30,		
	2022	2021	2020
Net sales			
United States	\$ 3,496	\$ 3,096	\$ 3,407
Foreign Countries	1,933	1,702	1,696
	<u>\$ 5,429</u>	<u>\$ 4,798</u>	<u>\$ 5,103</u>

The following table presents long-lived assets by geographic area (in millions):

	September 30, 2022	September 30, 2021
Long-lived assets		
United States	\$ 663	\$ 608
Foreign Countries	229	256
	<u>\$ 892</u>	<u>\$ 864</u>

18. STOCK-BASED COMPENSATION

The Company's equity compensation plans are designed to assist the Company in attracting, retaining, motivating and rewarding key employees, directors or consultants, and promoting the creation of long-term value for stockholders by closely aligning the interests of these individuals with those of the Company's stockholders. The Company's equity compensation plans provide for the granting of stock options.

Non-cash stock compensation expense recognized by the Company during the fiscal years ended September 30, 2022, 2021 and 2020 was \$152.7 million, \$128.9 million and \$92.7 million, respectively. The related tax benefit for the fiscal years ended September 30, 2022, 2021 and 2020 was \$18.4 million, \$20.9 million and \$11.0 million, respectively. Of the non-cash stock compensation expense recorded in fiscal 2022, 2021 and 2020, \$150.3 million, \$121.0 million and \$86.8 million was recorded as a component of additional paid in capital and \$2.4 million, \$7.9 million and \$5.9 million was recorded as a component of other non-current liabilities. The liability awards relate to stock options granted between fiscal 2017 to fiscal 2020 from the 2014 stock option plan to certain employees in lieu of these individuals receiving salary and bonus compensation paid in cash. The vesting of the stock options are subject to the achievement of the same operating performance goals as other grants. The liability is remeasured each reporting period based on the market value of our common shares on the last day of the reported period. The other non-current liabilities related to stock-based compensation as of September 30, 2022 and 2021 was \$25.5 million and \$23.1 million, respectively.

The weighted-average grant date fair value of options granted during the fiscal years ended September 30, 2022, 2021 and 2020 was \$254.21, \$193.47 and \$157.41, respectively. The total fair value of options vested during fiscal years ended September 30, 2022, 2021 and 2020 was \$88.0 million, \$92.0 million and \$97.2 million, respectively.

Compensation expense is recognized based upon probability assessments of awards that are expected to vest in future periods, adjusted for expected forfeitures. Such probability assessments are subject to revision and, therefore, unrecognized compensation expense is subject to future changes in estimate. As of September 30, 2022, there was approximately \$204.4 million of total unrecognized compensation expense related to non-vested awards expected to vest, which is expected to be recognized over a weighted-average period of 2.5 years.

On November 12, 2021, the Compensation Committee of the Board of Directors approved the Company's established performance criteria required to be achieved for the options granted in fiscal 2020 and in fiscal 2021 with a scheduled vesting date of September 30, 2022. This action resulted in a modification for accounting purposes under ASC 718 for the options granted in fiscal years 2020 and 2021, consisting of 239 individuals, including all of the independent directors and certain executive officers. An additional \$5.1 million of stock compensation expense for fiscal 2022 resulted from this modification.

The fair value of the Company's employee stock options was estimated at the date of grant or modification using a Black-Scholes option-pricing model with the following weighted average assumptions for all options granted during the fiscal years ended:

	Fiscal Years Ended September 30,		
	2022	2021	2020
Risk-free interest rate	1.47% to 2.97%	0.42% to 0.86%	0.26% to 1.65%
Expected life of options	6.5 years	5.5 years	5 to 5.5 years
Expected dividend yield of stock	—	—	—
Expected volatility of stock	37% to 38%	36%	25% to 39%

The risk-free interest rate is based upon the U.S. Treasury bond rates as of the grant date or modification date. The average expected life of stock-based awards is based on the Company's actual historical exercise experience. Expected volatility of stock was calculated using a rate based upon the historical volatility of TransDigm's common stock up to the expected life of the options. The Company estimates stock option forfeitures based on historical data. The total number of stock options expected to vest is adjusted by actual and estimated forfeitures. Changes to the actual and estimated forfeitures will result in a cumulative adjustment in the period of change. Notwithstanding the special cash dividends declared and paid from time to time, the Company historically has not declared and paid regular cash dividends and does not anticipate declaring and paying regular cash dividends in future periods; thus, no dividend yield assumption is used.

2019 Stock Option Plan

In August 2019, the Board of Directors of TD Group adopted a new stock option plan, which was subsequently approved by stockholders on October 3, 2019. The 2019 stock option plan permits TD Group to award stock options to our key employees, directors or consultants. The total number shares of TD Group common stock reserved for issuance or delivery under the 2019 stock option plan is 4,000,000, subject to adjustment in the event of any stock dividend or split, reorganization, recapitalization, merger, share exchange or any other similar corporate transaction or event. No grants have been made from TD Group's 2019 stock option plan as of September 30, 2022.

2014 Stock Option Plan

In July 2014, the Board of Directors of TD Group adopted the 2014 stock option plan, which was subsequently approved by stockholders on October 2, 2014. The 2014 stock option plan permits TD Group to award stock options to our key employees, directors or consultants. The total number of shares of TD Group common stock reserved for issuance or delivery under the 2014 stock option plan is 5,000,000, subject to adjustment in the event of any stock dividend or split, reorganization, recapitalization, merger, share exchange or any other similar corporate transaction or event.

Performance Vested Stock Options – Generally all of the options granted through September 30, 2022 under the 2014 stock option plan have been pursuant to an equity incentive program adopted by the Company in 2008. Under the 2008 equity incentive program, generally all of the options granted will vest based on the Company's achievement of established operating performance goals. The following table summarizes the activity, pricing and other information for the Company's performance vested stock-based award activity during the fiscal year ended September 30, 2022:

	Number of Options	Weighted-Average Exercise Price Per Option	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at September 30, 2021	4,202,923	\$ 403.12		
Granted	547,480	637.14		
Exercised	(180,060)	328.14		
Forfeited	(262,537)	496.16		
Expired	(5,100)	592.48		
Outstanding at September 30, 2022	4,302,706	\$ 424.54	6.5 years	\$ 533,897,229
Expected to vest	1,138,982	\$ 554.50	7.9 years	\$ 27,283,129
Exercisable at September 30, 2022	2,952,644	\$ 361.43	5.8 years	\$ 506,671,180

At September 30, 2022, there were 346,451 remaining shares available for award under TD Group's 2014 stock option plan.

2006 Stock Incentive Plan

In conjunction with the consummation of the Company's initial public offering, a 2006 stock incentive plan was adopted by TD Group. In July 2008 and March 2011, the plan was amended to increase the number of shares available for issuance thereunder. TD Group reserved 8,119,668 shares of its common stock for issuance to key employees, directors or consultants under the plan. Awards under the plan were in the form of options, restricted stock or other stock-based awards. Options granted under the plan expire no later than the tenth anniversary of the applicable date of grant of the options, and have an exercise price of not less than the fair market value of our common stock on the date of grant. Restricted stock granted under the plan vested over three years. No restricted stock units remained outstanding as of September 30, 2018.

Performance Vested Stock Options – All of the options granted under the 2006 stock incentive plan have been pursuant to an equity incentive program adopted by the Company in 2008. Under the 2008 equity incentive program, all of the options granted vest based on the Company's achievement of established operating performance goals. The following table summarizes the activity, pricing and other information for the Company's performance vested stock-based award activity during the fiscal year ended September 30, 2022:

	Number of Options	Weighted-Average Exercise Price Per Option	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at September 30, 2021	1,548,605	\$ 185.71		
Granted	—	—		
Exercised	(465,620)	148.64		
Forfeited	—	—		
Expired	—	—		
Outstanding at September 30, 2022	1,082,985	\$ 193.05	2.3 years	\$ 359,303,394
Exercisable at September 30, 2022	1,082,985	\$ 193.05	2.3 years	\$ 359,303,394

The 2006 stock incentive plan expired on March 14, 2016 and no further shares were granted under the plan thereafter.

The total intrinsic value of performance options exercised during the fiscal years ended September 30, 2022, 2021 and 2020 was \$279.4 million, \$355.3 million and \$394.2 million, respectively.

Dividend Equivalent Plans

Until August 5, 2022, pursuant to the 2014 Stock Option Plan Dividend Equivalent Plan and the Third Amended and Restated 2006 Stock Incentive Plan Dividend Equivalent Plan, all of the options granted under the existing stock option plans were entitled to certain dividend equivalent payments in the event of the declaration of a dividend by the Company.

On August 5, 2022, the Board of Directors adopted an Amended and Restated 2014 Stock Option Plan Dividend Equivalent Plan and a Fourth Amended and Restated 2006 Stock Incentive Plan Dividend Equivalent Plan clarifying the manner in which the Company pays dividend equivalents in cash. The amendments did not represent a change in the Company's practice. Simultaneously, all members of the Board of Directors executed amendments to their option agreements resulting in the directors no longer receiving dividend equivalent payments in cash, but rather for dividends declared after July 27, 2022 (including the \$18.50 per share special dividend declared and paid in August 2022), dividends will result in a reduction of strike price on the outstanding options held by the directors.

Dividend equivalent payments on vested options were \$85.7 million, \$72.5 million and \$184.9 million during the fiscal years ended September 30, 2022, 2021 and 2020, respectively. At September 30, 2022, there was \$38.6 million recorded in accrued and other current liabilities and \$22.2 million accrued in other non-current liabilities on the consolidated balance sheets related to future dividend equivalent payments.

19. LEASES

The Company leases certain manufacturing facilities, offices, land, equipment and vehicles. Such leases, some of which are noncancellable and, in many cases, include renewals, expire at various dates. Such options to renew are included in the lease term when it is reasonably certain that the option will be exercised. The Company's lease agreements typically do not contain any significant residual value guarantees or restrictive covenants, and payments within certain lease agreements are adjusted periodically for changes in an index or rate.

The Company determines if an arrangement is a lease at inception. Operating lease assets and liabilities are recognized at the commencement date of the lease based on the present value of lease payments over the lease term. Lease assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. The discount rate implicit within our leases is generally not determinable and therefore we determine the discount rate based on our incremental borrowing rate. The incremental borrowing rate for our leases is determined based on the lease term and the currency in which lease payments are made. The length of a lease term includes options to extend or terminate the lease when it is reasonably certain that the Company will exercise those options. The Company made an accounting policy election to not recognize lease assets or liabilities for leases with a term of 12 months or less. Additionally, when accounting for leases, the Company combines payments for leased assets, related services and other components of a lease.

The components of lease expense for the fiscal years ended September 30, 2022 and 2021 are as follows (in millions):

	Classification	Fiscal Years Ended September 30,	
		2022	2021
Operating lease cost	Cost of sales or selling and administrative expenses	\$ 24	\$ 29
Finance lease cost			
Amortization of leased assets	Cost of sales	6	4
Interest on lease liabilities	Interest expense - net	9	6
Total lease cost		\$ 39	\$ 39

Supplemental cash flow information related to leases for the fiscal years ended September 30, 2022 and 2021 is as follows (in millions):

	Fiscal Years Ended September 30,	
	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash outflows from operating leases	\$ 24	\$ 29
Operating cash outflows from finance leases	8	6
Financing cash outflows from finance leases	2	2
Lease assets obtained in exchange for new lease obligations:		
Operating leases	\$ 21	\$ 41
Financing leases	51	25

Supplemental balance sheet information related to leases is as follows (in millions):

	Classification	September 30, 2022	September 30, 2021
Operating Leases			
Operating lease right-of-use assets	Other assets	\$ 85	\$ 94
Current operating lease liabilities	Accrued and other current liabilities	18	20
Long-term operating lease liabilities	Other non-current liabilities	71	79
Total operating lease liabilities		\$ 89	\$ 99
Finance Leases			
Finance lease right-of-use assets, net	Property, plant and equipment - net	\$ 137	\$ 104
Current finance lease liabilities	Current portion of long-term debt	2	2
Long-term finance lease liabilities	Long-term debt	144	98
Total finance lease liabilities		\$ 146	\$ 100

As of September 30, 2022, the Company has the following remaining lease term and weighted average discount rates:

Weighted-average remaining lease term

Operating leases	7.8 years
Finance leases	20.0 years

Weighted-average discount rate

Operating leases	5.9%
Finance leases	7.1%

Maturities of lease liabilities at September 30, 2022 are as follows (in millions):

	Operating Leases	Finance Leases
2023	\$ 21	\$ 12
2024	18	13
2025	16	13
2026	12	13
2027	11	13
Thereafter	35	230
Total future minimum lease payments	113	294
Less: imputed interest	24	148
Present value of lease liabilities reported	<u>\$ 89</u>	<u>\$ 146</u>

20. FAIR VALUE MEASUREMENTS

The following table presents our assets and liabilities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy. The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs (other than quoted prices) that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The following summarizes the carrying amounts and fair values of financial instruments (in millions):

	Level	September 30, 2022		September 30, 2021	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
Assets:					
Cash and cash equivalents	1	\$ 3,001	\$ 3,001	\$ 4,787	\$ 4,787
Interest rate cap agreements ⁽¹⁾	2	50	50	8	8
Interest rate swap agreements ⁽¹⁾	2	77	77	—	—
Interest rate swap agreements ⁽²⁾	2	68	68	—	—
Liabilities:					
Interest rate swap agreements ⁽³⁾	2	—	—	100	100
Interest rate swap agreements ⁽⁴⁾	2	—	—	180	180
Foreign currency forward exchange contracts ⁽³⁾	2	11	11	4	4
Short-term borrowings - trade receivable securitization facility ⁽⁴⁾	2	350	350	349	349
<i>Long-term debt, including current portion:</i>					
Term loans ⁽⁵⁾	2	7,256	6,976	7,318	7,268
Revolving credit facility ⁽⁵⁾	2	—	—	200	200
2025 Secured Notes ⁽⁵⁾	1	1,094	1,115	1,093	1,170
6.375% 2026 Notes ⁽⁵⁾	1	946	884	945	981
6.875% 2026 Notes ⁽⁵⁾	1	495	473	494	527
2026 Secured Notes ⁽⁵⁾	1	4,368	4,257	4,359	4,593
7.50% 2027 Notes ⁽⁵⁾	1	547	524	546	578
5.50% 2027 Notes ⁽⁵⁾	1	2,635	2,286	2,632	2,730
4.625% 2029 Notes ⁽⁵⁾	1	1,191	966	1,190	1,196
4.875% 2029 Notes ⁽⁵⁾	1	744	606	743	751
Government refundable advances	2	23	23	29	29
Finance lease obligations	2	146	146	100	100

⁽¹⁾ Included in prepaid expenses and other on the consolidated balance sheets.

⁽²⁾ Included in other assets on the consolidated balance sheets.

⁽³⁾ Included in accrued and other current liabilities on the consolidated balance sheets.

⁽⁴⁾ Included in other non-current liabilities on the consolidated balance sheets.

⁽⁵⁾ The carrying amount of the debt instrument is presented net of the debt issuance costs, premium and discount. Refer to Note 12, "Debt," for gross carrying amounts.

The Company values its financial instruments using an industry standard market approach, in which prices and other relevant information are generated by market transactions involving identical or comparable assets or liabilities. No financial instruments were recognized or disclosed using unobservable inputs (i.e., Level 3).

Interest rate swaps were measured at fair value using quoted market prices for the swap interest rate indexes over the term of the swap discounted to present value versus the fixed rate of the contract. The interest rate caps were measured at fair value using implied volatility rates of each individual caplet and the yield curve for the related periods.

The Company's derivative contracts consist of foreign currency exchange contracts and interest rate swap and cap agreements. These derivative contracts are over-the-counter, and their fair value is determined using modeling techniques that include market inputs such as interest rates, yield curves, and currency exchange rates. These contracts are categorized as Level 2 in the fair value hierarchy.

The estimated fair value of the Company's term loans was based on information provided by the agent under the Company's senior secured credit facility. The estimated fair values of the Company's notes were based upon quoted market prices. There has not been any impact to the fair value of derivative liabilities due to the Company's own credit risk. Similarly, there has not been any significant impact to the fair value of derivative assets based on the Company's evaluation of counterparties' credit risks.

The fair value of cash and cash equivalents, trade accounts receivable-net and accounts payable approximated carrying value due to the short-term nature of these instruments at September 30, 2022 and 2021.

21. DERIVATIVES AND HEDGING ACTIVITIES

The Company is exposed to, among other things, the impact of changes in foreign currency exchange rates and interest rates in the normal course of business. The Company's risk management program is designed to manage the exposure and volatility arising from these risks, and utilizes derivative financial instruments to offset a portion of these risks. The Company uses derivative financial instruments only to the extent necessary to hedge identified business risks and does not enter into such transactions for trading purposes. The Company generally does not require collateral or other security with counterparties to these financial instruments and is therefore subject to credit risk in the event of nonperformance; however, the Company monitors credit risk and currently does not anticipate nonperformance by other parties. These derivative financial instruments do not subject the Company to undue risk, as gains and losses on these instruments generally offset gains and losses on the underlying assets, liabilities, or anticipated transactions that are being hedged. The Company has agreements with each of its swap and cap counterparties that contain a provision whereby if the Company defaults on the credit facility the Company could also be declared in default on its swaps and caps, resulting in an acceleration of payment under the swaps and caps.

All derivative financial instruments are recorded at fair value in the consolidated balance sheets. For a derivative that has not been designated as an accounting hedge, the change in the fair value is recognized immediately through earnings. For a derivative that has been designated as an accounting hedge of an existing asset or liability (a fair value hedge), the change in the fair value of both the derivative and underlying asset or liability is recognized immediately through earnings. For a derivative designated as an accounting hedge of an anticipated transaction (a cash flow hedge), the change in the fair value is recorded on the consolidated balance sheets in accumulated other comprehensive loss to the extent the derivative is effective in mitigating the exposure related to the anticipated transaction. The change in the fair value related to the ineffective portion of the hedge, if any, is immediately recognized in earnings. The amount recorded within accumulated other comprehensive loss is reclassified into earnings in the same period during which the underlying hedged transaction affects earnings.

Interest Rate Swap and Cap Agreements – Interest rate swap and cap agreements are used to manage interest rate risk associated with floating-rate borrowings under our credit facility. The interest rate swap and cap agreements utilized by the Company effectively modify the Company's exposure to interest rate risk by converting a portion of the Company's floating-rate debt to a fixed rate basis through the expiration date of the interest rate swap and cap agreements, thereby reducing the impact of interest rate changes on future interest expense. These agreements involve the receipt of floating rate amounts in exchange for fixed rate interest payments over the term of the agreements without an exchange of the underlying principal amount. These derivative instruments qualify as effective cash flow hedges under U.S. GAAP. For these cash flow hedges, the effective portion of the gain or loss from the financial instruments was initially reported as a component of accumulated other comprehensive loss in stockholders' deficit and subsequently reclassified into earnings in the same line as the hedged item in the same period or periods during which the hedged item affected earnings. As the interest rate swap and cap agreements are used to manage interest rate risk, any gains or losses from the derivative instruments that are reclassified into earnings are recognized in interest expense-net in the consolidated statements of income.

The following table summarizes the Company's interest rate swap agreements:

Aggregate Notional Amount (in millions)	Start Date	End Date	Conversion of Related Variable Rate Debt to Fixed Rate of:
\$500	6/29/2018	3/31/2025	5.25% (3.0% plus the 2.25% margin percentage)
\$1,500	6/30/2022	3/31/2025	5.35% (3.1% plus the 2.25% margin percentage)
\$700	3/31/2023	9/30/2025	3.55% (1.3% plus the 2.25% margin percentage)
\$1,400	6/30/2021	3/31/2023	5.25% (3.0% plus the 2.25% margin percentage)
\$900	12/31/2021	6/28/2024	5.35% (3.1% plus the 2.25% margin percentage)
\$400	9/30/2022	6/28/2024	5.25% (3.0% plus the 2.25% margin percentage)

The following table summarizes the Company's interest rate cap agreements:

Aggregate Notional Amount (in millions)	Start Date	End Date	Offsets Variable Rate Debt Attributable to Fluctuations Above:
\$700	3/31/2023	9/30/2025	Three-month LIBOR rate of 1.25%

Certain derivative asset and liability balances are offset where master netting agreements provide for the legal right of setoff. For classification purposes, we record the net fair value of each type of derivative position that is expected to settle in less than one year with each counterparty as a net current asset or liability and each type of long-term position as a net non-current asset or liability. The amounts shown in the table below represent the gross amounts of recognized assets and liabilities, the amounts offset in the consolidated balance sheets and the net amounts of assets and liabilities presented therein (in millions):

	September 30, 2022		September 30, 2021	
	Asset	Liability	Asset	Liability
Interest rate cap agreements	\$ 50	\$ —	\$ 8	\$ —
Interest rate swap agreements	145	—	—	280
Net derivatives as classified in the consolidated balance sheet ⁽¹⁾	\$ 195	\$ —	\$ 8	\$ 280

⁽¹⁾ Refer to Note 20, "Fair Value Measurements," for the consolidated balance sheets classification of our interest rate swap and cap agreements. The change in the fair value of the interest rate swap and cap agreements is attributable to the upward trend in LIBOR during fiscal 2022.

Based on the fair value amounts of the interest rate swap and cap agreements determined as of September 30, 2022, the estimated net amount of existing (gains) and losses and caplet amortization expected to be reclassified into interest expense-net within the next 12 months is approximately \$(76.3) million.

Foreign Currency Forward Exchange Contracts – The Company transacts business in various foreign currencies, which subjects the Company's cash flows and earnings to exposure related to changes in foreign currency exchange rates. These exposures arise primarily from purchases or sales of products and services from third parties. Foreign currency forward exchange contracts provide for the purchase or sale of foreign currencies at specified future dates at specified exchange rates, and are used to offset changes in the fair value of certain assets or liabilities or forecasted cash flows resulting from transactions denominated in foreign currencies. At September 30, 2022, the Company has outstanding foreign currency forward exchange contracts to sell U.S. dollars with notional amounts of \$165.6 million. The maximum duration of the Company's foreign currency cash flow hedge contracts at September 30, 2022 is 12 months. These notional values consist of contracts for the Canadian dollar and the euro and are stated in U.S. dollar equivalents at spot exchange rates at the respective trade dates. Amounts related to foreign currency forward exchange contracts included in accumulated other comprehensive loss in stockholders' deficit are reclassified into net sales when the hedged transaction settles.

During the fiscal year ended September 30, 2022, the losses reclassified on settlements of foreign currency forward exchange contracts designated as cash flow hedges into net sales was approximately \$8.1 million. The losses were previously recorded as a component of accumulated other comprehensive loss in stockholders' deficit.

As of September 30, 2022, the Company expects to record a net loss of approximately \$10.8 million on foreign currency forward exchange contracts designated as cash flow hedges to net sales over the next 12 months.

22. ACCUMULATED OTHER COMPREHENSIVE LOSS

The following table presents the total changes by component in accumulated other comprehensive loss (“AOCI”), net of taxes, for the fiscal years ended September 30, 2022, 2021 and 2020 (in millions):

	Unrealized gains (losses) on derivatives ⁽¹⁾	Pension and postretirement benefit plans adjustment ⁽²⁾	Foreign currency translation adjustment	Total
Balance at September 30, 2020	\$ (302)	\$ (8)	\$ (91)	\$ (401)
Current-period other comprehensive income (loss) before reclassification	68	(10)	90	148
Amounts reclassified from AOCI	5	—	—	5
Net current-period other comprehensive income	73	(10)	90	153
Balance at September 30, 2021	(229)	(18)	(1)	(248)
Current-period other comprehensive income (loss) before reclassification	362	2	(379)	(15)
Amounts reclassified from AOCI	(10)	6	—	(4)
Net current-period other comprehensive income	352	8	(379)	(19)
Balance at September 30, 2022	\$ 123	\$ (10)	\$ (380)	\$ (267)

(1) Represents unrealized gains (losses) on derivatives designated and qualifying as cash flow hedges, net of tax expense (benefit), of \$112 million, \$(23) million and \$36 million for the fiscal years ended September 30, 2022, 2021 and 2020, respectively.

(2) Defined pension plan and postretirement benefit plan activity represents pension liability adjustments, net of tax. For the fiscal year ended September 30, 2022, pension liability adjustments, net of tax of \$1 million, represents unrecognized actuarial losses reclassified to other expense (income) upon the settlement of the ERP. Refer to Note 13, “Retirement Benefits,” for additional information. Pension liability adjustments, net of taxes, for the fiscal years ended September 30, 2021 and 2020 were not material.

The following table presents a summary of reclassifications out of AOCI for the fiscal years ended September 30, 2022 and 2021. Reclassifications out of AOCI for the fiscal year ended September 30, 2020 were not material (in millions):

Description of reclassifications out of AOCI	Fiscal Years Ended September 30,	
	2022	2021
Amortization from redesignated interest rate swap and cap agreements ⁽¹⁾	\$ 1	\$ 2
(Losses) gains from settlement of foreign currency forward exchange contracts ⁽²⁾	(8)	4
Settlement charges from termination of the ERP ⁽³⁾	6	—
Deferred tax expense on reclassifications out of AOCI	(3)	(1)
Amounts reclassified into earnings, net of tax	\$ (4)	\$ 5

(1) This component of AOCI is included in interest expense-net. Refer to Note 21, “Derivatives and Hedging Activities,” for additional information.

(2) This component of AOCI is included in net sales. Refer to Note 21, “Derivatives and Hedging Activities,” for additional information.

(3) This component of AOCI is included in other expense (income). Refer to Note 13, “Retirement Plans,” for additional information.

23. DISCONTINUED OPERATIONS

No divestitures occurred during the fiscal year ended September 30, 2022. No divestitures occurring in the fiscal year ended September 30, 2021 met the criteria to qualify as discontinued operations under U.S. GAAP as none represented a strategic shift that has or will have a major affect on TransDigm's operations and financial results. Refer to Note 2, "Acquisitions and Divestitures," for additional disclosures on the Company's fiscal 2021 divestitures.

On December 20, 2019, TransDigm completed the divestiture of Souriau-Sunbank to Eaton for approximately \$920 million. Souriau-Sunbank was acquired by TransDigm as part of its acquisition of Esterline in March 2019 and was included in TransDigm's Non-aviation segment. The divestiture represented a strategic shift in TransDigm's business and, in accordance with U.S. GAAP, qualified as discontinued operations. Therefore, the results of operations of Souriau-Sunbank are presented in discontinued operations in the accompanying consolidated financial statements for the applicable periods.

The table below summarizes income from discontinued operations, net of tax, for the fiscal year ended September 30, 2020 (in millions):

	Fiscal Year Ended September 30, 2020
Net sales	\$ 79
Income from discontinued operations, before income taxes	11
Income tax provision	4
Income from discontinued operations, net of tax	7
Gain from sale of discontinued operations, net of tax	40
Income from discontinued operations, net of tax	\$ 47

Income from discontinued operations, net of tax, for the fiscal year ended September 30, 2020 was \$47 million and included \$7 million from the results of operations of Souriau-Sunbank and a gain on the sale of Souriau-Sunbank, net of tax, of \$40 million.

During the first quarter of fiscal 2022, the Company received approximately \$1 million in cash proceeds related to a final working capital settlement for the Souriau-Sunbank divestiture. These proceeds are classified as income from discontinued operations, net of tax, in the consolidated statements of income.

TRANSDIGM GROUP INCORPORATED
VALUATION AND QUALIFYING ACCOUNTS
FOR THE FISCAL YEARS ENDED SEPTEMBER 30, 2022, 2021, AND 2020
(Amounts in millions)

Column A Description	Column B Balance at Beginning of Period	Column C Additions		Column D Divestitures & Deductions from Reserve ⁽¹⁾	Column E Balance at End of Period
		Charged to Costs and Expenses	Acquisitions & Purchase Price Adjustments		
Year Ended September 30, 2022					
Allowance for uncollectible accounts	\$ 30	\$ 9	\$ —	\$ (4)	\$ 35
Inventory valuation reserves	194	21	3	(22)	196
Valuation allowance for deferred tax assets	74	62	1	—	137
Year Ended September 30, 2021					
Allowance for uncollectible accounts	\$ 37	\$ —	\$ —	\$ (7)	\$ 30
Inventory valuation reserves	178	42	10	(36)	194
Valuation allowance for deferred tax assets	132	(58)	—	—	74
Year Ended September 30, 2020					
Allowance for uncollectible accounts	\$ 17	\$ 21	\$ 3	\$ (4)	\$ 37
Inventory valuation reserves	124	34	37	(17)	178
Valuation allowance for deferred tax assets	118	15	(1)	—	132

⁽¹⁾ The amounts in this column represent the impact from divestitures, charge-offs net of recoveries and the impact of foreign currency translation adjustments.

EXHIBIT INDEX
TO FORM 10-K FOR THE YEAR ENDED SEPTEMBER 30, 2022

Exhibit No.	Description
3.65	Certificate of Amendment of Certificate of Incorporation, filed June 20, 2022, of Beta Transformer Technology Corporation (now known as Power Device Corporation)
3.146	Amendment to Certificate of Formation, filed February 4, 2021, of Telair International LLC (now known as Nordisk Aviation Products LLC)
3.219	Amendment to Certificate of Incorporation, filed December 20, 2021, of Cobham Defense Products, Inc. (now known as Chelton Defense Products, Inc.)
10.12	Employment Agreement, dated November 5, 2018, between TransDigm Group Incorporated and Halle Martin (fka Halle Terrion)*
10.13	Amendment to Employment Agreement, dated November 15, 2021, between TransDigm Group Incorporated and Halle Martin*
10.24	Form of Stock Option Agreement for options awarded in fiscal 2022*
10.26	Amendment to Fourth Amended and Restated TransDigm Group Incorporated 2006 Stock Incentive Plan Dividend Equivalent Plan*
10.28	Amendment to Amended and Restated TransDigm Group Incorporated 2014 Stock Option Plan Dividend Equivalent Plan*
10.55	Fourteenth Amendment to the Receivables Purchase Agreement dated as of July 25, 2022, among TransDigm Receivables LLC, TransDigm Inc., PNC Bank, National Association, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator, and Fifth Third Bank, as a Committed Purchaser and as Purchaser Agent for its Purchaser Group**
21.1	Subsidiaries of TransDigm Group Incorporated
22.1	Listing of Subsidiary Guarantors
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification by Principal Executive Officer of TransDigm Group Incorporated pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification by Principal Financial Officer of TransDigm Group Incorporated pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification by Principal Executive Officer of TransDigm Group Incorporated pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification by Principal Financial Officer of TransDigm Group Incorporated pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document: The XBRL Instance Document does not appear in the Inveractive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File: the cover page XBRL tags are embedded within the Inline XBRL document and are contained within Exhibit 101

* Indicates management contract or compensatory plan contract or arrangement.

** Schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish on a supplemental basis a copy of any omitted schedule or exhibit upon request by the Securities and Exchange Commission.

CERTIFICATE OF AMENDMENT
OF THE
CERTIFICATE OF INCORPORATION
OF

BETA TRANSFORMER TECHNOLOGY CORPORATION

(Insert the Current Name of Domestic Corporation)

Under Section 805 of the Business Corporation Law

FIRST: The current name of the corporation is:

Beta Transformer Technology Corporation

If the name of the corporation has been previously changed, the name under which it was originally formed is:

Transformer Technology Corporation

SECOND: The date of filing of the certificate of incorporation with the Department of State is:

October 24, 1977

THIRD: The amendment effected by this certificate of amendment is as follows:

The subject and full text of each amended paragraph must be stated.

FOR EXAMPLE, a certificate of amendment changing the name of the corporation would read as follows:

Paragraph FIRST of the Certificate of Incorporation relating to the name of the corporation is amended to read in its entirety as follows:

FIRST: The name of the corporation is (...new name...).

Paragraph FIRST of the Certificate of Incorporation relating to

the name of the corporation is amended to read in its entirety as follows:

is amended to read in its entirety as follows:

FIRST: The name of the corporation is Power Device Corporation

Paragraph _____ of the Certificate of Incorporation relating to

is amended to read in its entirety as follows:


FOURTH: The certificate of amendment was authorized by: *(Check the appropriate box)*

- The vote of the board of directors followed by a vote of a majority of all outstanding shares entitled to vote thereon at a meeting of shareholders.
- The vote of the board of directors followed by the unanimous written consent of the holders of all outstanding shares.

X Halle Martin
(Signature)

Halle Martin
(Name of Signer)

Secretary
(Title of Signer)

 <p>Secretary of State Foreign Limited Liability Company (LLC) Name Change Amendment</p>	LLC-6
---	-------



IMPORTANT — Read Instructions before completing this form.

Must be submitted with a current certificate evidencing the name change issued by the government agency where the LLC was formed. See Instructions.

Filing Fee – \$30.00

Copy Fees – First page \$1.00; each attachment page \$0.50;
Certification Fee - \$5.00

Note: You must file a Statement of Information (Form LLC-12) to change the LLC's business address(es), or to change the name or address of the LLC's agent for service of process. Statements of Information (Form LLC-12) can be filed online at lcbizfile.sos.ca.gov/SI.

Above Space For Office Use Only

1. LLC Exact Name Used in California (Enter the name used in California exactly as listed on the records of the California Secretary of State.)

Telair International LLC

2. LLC 12-Digit (File) Entity Number (Enter the exact 12-digit Entity (File) Number Issued by the California Secretary of State.)

2	0	1	5	0	9	8	1	0	0	4	6
---	---	---	---	---	---	---	---	---	---	---	---

3. New LLC Name in the State, Country, or Other Place of LLC Formation (If the LLC changed its name in the jurisdiction of formation, list the new LLC name as listed on your attached certificate evidencing the name change.)

Nordisk Aviation Products LLC

4. California Alternate Name, if Required (See instructions - Complete either 4a, 4b, 4c)

4a. List an alternate name to be used in California if: (1) the LLC name in Item 3 does not comply with California naming requirements or (2) you only are filing this form to change an existing alternate name used in California. List the alternate name exactly as it is to appear on the records of the California Secretary of State.
4b. Check this box if you completed Item 3, above and if applicable. If you check this box, do not complete Item 4a above or 4c below. <input type="checkbox"/> This LLC registered in California before January 1, 2014; currently transacts intrastate business in California under the alternate name listed in item 1 above; and upon this filing, will continue to transact intrastate business in California under the alternate name listed in Item 1 above.
4c. If you check this box, do not complete Item 4a or 4b above. <input type="checkbox"/> Check this box if you are relinquishing the California alternate name.

Signature

By signing, I affirm under penalty of perjury that the information herein is true and correct and that I am authorized to sign on behalf of the foreign LLC.

Additional signatures set forth on attached pages, if any, are incorporated herein by reference and made part of this Form LLC-6. (All attachments should be 8 1/2 x 11, one-sided, legible and clearly marked as an attachment to this Form LLC-6.)

Liza Sabol



Signature

Type or Print Name

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

The corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware does hereby certify:

FIRST: That at a meeting of the Board of Directors of Cobham Defense Products, Inc. resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "First" so that, as amended, said Article shall be and read as follows:

The name of the Corporation is Chelton Defense Products, Inc.

SECOND: That thereafter, pursuant to resolution of its Board of Directors, a special meeting of the stockholders of said corporation was duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

State of Delaware
Secretary of State
Division of Corporations
Delivered 12:39 PM 12/20/2021
FILED 12:39 PM 12/20/2021
SR 20214155074 - File Number 4415012

IN WITNESS WHEREOF, said corporation has caused this certificate to be signed this 14 day of December, 2021.

By:

Halle Martin

Authorized Officer

Title:

Secretary

Name:

Halle Martin

Print or Type

EMPLOYMENT AGREEMENT

THIS AGREEMENT, dated as of November 5, 2018, is made by and between TransDigm Group Incorporated, a Delaware corporation (the “Company”), and Halle Terrion (the “Executive”).

RECITALS:

WHEREAS, the Executive holds the position of General Counsel, Chief Compliance Officer and Secretary of the Company; and

WHEREAS, the parties would like to enter into an employment agreement on the terms and subject to the conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing and of the respective covenants and agreements set forth below, the parties hereto agree as follows:

1. Certain Definitions.

(a) “Annual Base Salary” shall have the meaning set forth in Section 4(a).

(b) “Board” shall mean the Board of Directors of the Company.

(c) “Cause” shall mean either of the following: (i) the repeated failure by the Executive, after written notice from the Board, substantially to perform her material duties and responsibilities as an officer or employee or director of the Company or any of its subsidiaries (other than any such failure resulting from incapacity due to reasonably documented physical or mental illness), or (ii) any willful misconduct by the Executive that has the effect of materially injuring the business of the Company or any of its subsidiaries, including, without limitation, the disclosure of material secret or confidential information of the Company or any of its subsidiaries.

(d) “COBRA” shall mean the Consolidated Omnibus Budget Reconciliation Act of 1985, as may be amended from time to time.

(e) “Code” shall mean the Internal Revenue Code of 1986, as amended. Reference to a Section of the Code includes all rulings, regulations, notices, announcements, decisions, orders and other pronouncements that are issued by the United States Department of the Treasury, the Internal Revenue Service, or any court of competent jurisdiction that are lawful and pertinent to the interpretation, application or effectiveness of such Section.

(f) “Common Stock” shall mean the common stock of the Company, \$0.01 par value per share.

(g) “Company” shall have the meaning set forth in the preamble hereto.

(h) “Compensation Committee” shall mean the Compensation Committee of the Board whose members shall be appointed by the Board from time to time.

(i) “Date of Termination” shall mean (i) if the Executive’s employment is terminated by reason of her death, the date of her death, and (ii) if the Executive’s employment is terminated pursuant to Sections 5(a)(ii) - (vi), the date specified in the Notice of Termination.

(j) “Disability” shall mean the Executive’s absence from employment with the Company due to: (i) her inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months; or (ii) such medically determinable physical or mental impairment, which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, and for which the Executive is receiving income replacement benefits for a period of not less than three months under an accident and health plan covering the Company’s employees.

(k) “Effective Date” shall mean the date of this Agreement.

(l) “Equity Compensation Agreements” shall mean any written agreements between the Company and the Executive pursuant to which the Executive holds or is granted options to purchase Common Stock, including, without limitation, agreements evidencing options granted under any option plan adopted or maintained by the Company for employees generally, and any management deferred compensation or similar plans of the Company.

(m) “Exchange Act” shall mean the Securities Exchange Act of 1934, as amended.

(n) “Executive” shall have the meaning set forth in the preamble hereto.

(o) “Good Reason” shall mean the occurrence of any of the following: (i) a material diminution in the Executive’s title, duties or responsibilities, without her prior written consent, or (ii) a reduction of the Executive’s aggregate cash compensation (including bonus opportunities), benefits or perquisites, without her prior written consent, or (iii) any material breach of this Agreement by the Company.

(p) “Notice of Termination” shall have the meaning set forth in Section 5(b).

(q) “Payment Period” shall have the meaning set forth in Section 6(b).

(r) “Specified Employee” shall have the meaning set forth in Code Section 409A

(s) “Term” shall have the meaning set forth in Section 2.

2. Employment. The Company shall employ the Executive, for the period set forth in this Section 2, in the position(s) set forth in Section 3 and upon the other terms and conditions herein provided. The term of employment under this Agreement (the “Term”) shall be for the period beginning on the Effective Date and ending on December 31, 2023 unless earlier terminated as provided in Section 5.

3. Position and Duties. During the Term, the Executive shall serve as General Counsel, Chief Compliance Officer and Secretary of each of the Company and its subsidiary, TransDigm, Inc. (“TransDigm”), with such customary responsibilities, duties and authority as may from time to time be assigned to the Executive by the Chief Executive Officer. During the Term, the Executive shall devote substantially all her working time and efforts to the business and affairs of the Company and TransDigm; provided, that it shall not be considered a violation of the foregoing for the Executive to (i) with the prior consent of the Board (which consent shall not unreasonably be withheld), serve on corporate, industry, civic or charitable boards or committees, and (ii) manage her personal investments, so long as none of such activities significantly interferes with the Executive’s duties hereunder.

4. Compensation and Related Matters.

(a) Annual Base Salary. During the Term, the Executive shall receive a base salary at a rate of \$450,000 per annum, payable in accordance with the Company’s normal payroll practices, which shall be reviewed by the Compensation Committee annually and may be increased, but not decreased, upon such review (the “Annual Base Salary”).

(b) Bonus. For each fiscal year during the Term, the Executive shall be eligible to participate in the Company’s annual cash bonus plan in accordance with terms and provisions which shall be consistent with the Company’s executive bonus policy in effect as of the date hereof. The Executive’s target bonus for fiscal year 2018 and thereafter will be 40% of her Annual Base Salary and may be increased, but not decreased, from time to time.

(c) Non-Qualified Deferred Compensation. During the Term, the Executive shall be eligible to participate in any non-qualified deferred compensation plan or program (if any) offered by the Company to its executives.

(d) Long Term Incentive Compensation. During the Term, the Executive shall be entitled to participate in the Option Plan or any successor plan thereto.

(e) Benefits. During the Term, the Executive shall be entitled to participate in the other employee benefit plans, programs and arrangements of the Company now (or, to the extent determined by the Board or Compensation Committee, hereafter) in effect which are applicable to the senior officers of the Company generally, subject to and on a basis consistent with the terms, conditions and overall administration thereof (including the right of the Company to amend, modify or terminate such plans).

(f) Expenses. Pursuant to the Company’s customary policies in force at the time of payment, the Executive shall be reimbursed for all expenses properly incurred by the Executive on the Company’s behalf in the performance of the Executive’s duties hereunder.

(g) Vacation. The Executive shall be entitled to an amount of annual vacation days, and to compensation in respect of earned but unused vacation days in accordance with the Company’s vacation policy as in effect as of the Effective Date. The Executive shall also be entitled to paid holidays in accordance with the Company’s practices with respect to same as in effect as of the Effective Date.

5. Termination.

(a) The Executive's employment hereunder may be terminated by the Company or the Executive, as applicable, without any breach of this Agreement only under the following circumstances and in accordance with subsection (b):

- (i) Death. The Executive's employment hereunder shall terminate upon her death.
- (ii) Disability. If the Company determines in good faith that the Executive has incurred a Disability, the Company may give the Executive written notice of its intention to terminate the Executive's employment. In such event, the Executive's employment with the Company shall terminate effective on the 30th day after receipt of such notice by the Executive, provided that within such 30 day period the Executive shall not have returned to full-time performance of her duties. The Executive shall continue to receive her Annual Base Salary until the 90th day following the date of the Notice of Termination.
- (iii) Termination for Cause. The Company may terminate the Executive's employment hereunder for Cause.
- (iv) Resignation for Good Reason. The Executive may terminate her employment hereunder for Good Reason.
- (v) Termination without Cause. The Company may terminate the Executive's employment hereunder without Cause.
- (vi) Resignation without Good Reason. The Executive may resign her employment hereunder without Good Reason.

(b) Notice of Termination. Any termination of the Executive's employment by the Company or by the Executive under this Section 5 (other than termination pursuant to subsection (a)(i)) shall be communicated by a written notice from the Chief Executive Officer of the Company or the Executive to the other indicating the specific termination provision in this Agreement relied upon, (and, in the case of Resignation for Good Reason, setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under Section 5(a)(iv), and specifying a Date of Termination which, in the case of Resignation for Good Reason or Resignation without Good Reason pursuant to Section 5(a)(iv) or 5(a)(vi), respectively, shall be at least 90 days following the date of such notice (a "Notice of Termination"). In the event of the Executive's Resignation for Good Reason pursuant to Section 5(a)(iv), the Company shall have the right, if the basis for such Good Reason is curable, to cure the same within 30 days following the receipt of the Notice of Termination, and Good Reason shall not be deemed to exist if the Company cures the event giving rise to Good Reason within such 30 day period. The Executive shall continue to receive her Annual Base Salary, annual bonus and all other compensation and perquisites referenced in Section 4 through the Date of Termination.

6. Severance Payments.

(a) Termination for any Reason. In the event the Executive's employment with the Company is terminated for any reason, the Company shall pay the Executive (or her beneficiary in the event of her death) any unpaid Annual Base Salary that has accrued as of the Date of Termination, any unreimbursed expenses due to the Executive in accordance with the Company's expense reimbursement policy and an amount equal to compensation for accrued but unused sick days and vacation days. The Company shall permit the Executive to elect to continue health plan coverage in accordance with the requirements of applicable law (e.g. COBRA coverage), at the applicable monthly cost charged for such coverage (the "Monthly COBRA Coverage Continuation Rate"). The Company may require the Executive to complete and file any election forms that are generally required of other employees to obtain COBRA coverage; and the Executive's COBRA coverage may be terminable in accordance with applicable law. The Executive shall also be entitled to accrued, vested benefits under the Company's benefit plans and programs as provided therein. The Executive shall be entitled to the additional payments and benefits described below only as set forth herein.

(b) Termination without Cause, Resignation for Good Reason or Termination by Reason of Death or Disability. Subject to Sections 6(c) and (d) and the restrictions contained herein, in the event of the Executive's Termination without Cause (pursuant to Section 5(a)(v)), Resignation for Good Reason (pursuant to Section 5(a)(iv)) or termination by reason of death or Disability (pursuant to Section 5(a)(i) or (ii), respectively), the Company shall pay to the Executive the amounts described in subsection (a). In addition, subject to Sections 6(c) and (d) and the restrictions contained herein, and in the case of Termination without Cause (pursuant to Section 5(a)(v), Resignation for Good Reason (pursuant to Section 5(a)(iv) or Disability (pursuant to Section 5(a)(ii)) subject to the Executive's execution and non-revocation of a customary release in favor of the Company (the "Release") no later than thirty (30) days following the Date of Termination, the Company shall pay to the Executive (or his beneficiary in the event of his death) an amount equal to the "Severance Amount" described below. For purposes of this Agreement the Severance Amount is equal to the sum of:

- (i) 1.25 times her Annual Base Salary,
- (ii) 1.25 times the greater of (A) the total of all bonuses paid (or payable) to executive in respect of the fiscal year ending immediately prior to the Date of Termination, excluding any bonuses that are extraordinary in nature (e.g., a transaction related bonus) or (B) the target bonuses for the fiscal year in which the Date of Termination falls, determined in accordance with the Company's bonus program or programs, if any, and
- (iii) 15.0 times the difference of (A) the Monthly COBRA Continuation Coverage Rate determined as of the Date of Termination for the Executive's applicable health plan coverage as in effect on such date, less (B) the monthly cost to Executive that is being charged for such coverage as of the Date of Termination.

The Severance Amount as so determined shall be payable to the Executive (or her beneficiary) in substantially equal installments over the 12 month period following the Date of Termination (the "Payment Period") commencing no later than thirty (30) days following the execution and non-revocation of the Release, in accordance with the Company's regular payroll practices. The first installment payment shall include all amounts that would have otherwise been paid to the Executive during the period beginning on the Date of Termination and ending on the first installment payment date. Notwithstanding the foregoing, in the event that the end of the thirty (30) day notice and revocation period for the Release would result in the first installment payment occurring in the taxable year following the year in which the Date of Termination occurs, the first installment payment shall be made in the taxable year following the year in which the Date of Termination occurs.

(c) Benefits Provided Upon Termination of Employment. If the Executive's termination or resignation does not constitute a "separation from service," as such term is defined under Code Section 409A, the Executive shall nevertheless be entitled to receive all of the payments and benefits that the Executive is entitled to receive under this Agreement on account of her termination of employment. However, the payments and benefits that the Executive is entitled to under this Agreement shall not be provided to the Executive until such time as the Executive has incurred a "separation from services" within the meaning of Code Section 409A.

(d) Payments on Account of Termination to a Specified Employee. Notwithstanding the foregoing provisions of Sections 6(a) or 6(b), in the event that the Executive is determined to be a Specified Employee at the time of her termination of employment under this Agreement (or, if later, her "separation from service" under Code Section 409A), to the extent that a payment, reimbursement or benefit under Section 6(b) is considered to provide for a "deferral of compensation" (as determined under Code Section 409A), then such payment, reimbursement or benefit shall not be paid or provided until six months after the Executive's separation from service, or her death, whichever occurs first. Any payments, reimbursements or benefits that are withheld under this provision for the first six months shall be payable in a lump sum on the 181st day after such termination of employment (or, if later, separation from service). The restrictions in this Section 6(d) shall be interpreted and applied solely to the minimum extent necessary to comply with the requirements of Code Section 409A(a)(2)(B). Accordingly, payments, benefits or reimbursements under Section 6(b) or any other part of this Agreement may nevertheless be provided to Executive with the six-month period following the date of Executive's termination of employment under this Agreement (or, if later, her "separation from service" under Code Section 409A), to the extent that it would nevertheless be permissible to do so under Code Section 409A because those payments, reimbursements or benefits are (i) described in Treasury Regulations Section 1.409A-1(b)(9)(iii) (i.e., payments within the limitations therein that are being made on account of an involuntary termination or termination for good reason, within the meaning of the Treasury Regulations), or (ii) described in Treasury Regulation Section 1.409A-1(b)(4) (i.e., payments which are treated as short-term deferrals within the meaning of the Treasury Regulations), or (iii) benefits described in Treasury Regulations Section 1.409A-1(b)(9)(v) (e.g. health care benefits).

7. Competition; Nonsolicitation.

(a) During the Term and, following any termination of Executive's employment, for a period equal to (i) the Payment Period, in the case of a termination of employment for which payments are made pursuant to Section 6(b) hereof, or (ii) 24 months from the date of such termination in the event of a voluntary termination of employment by the Executive without Good Reason, or a termination by the Company for Cause, the Executive shall not, without the prior written consent of the Board, directly or indirectly engage in, or have any interest in, or manage or operate any person, firm, corporation, partnership or business (whether as director, officer, employee, agent, representative, partner, security holder, consultant or otherwise) that engages in any business (other than a business that constitutes less than 5% of the relevant entity's net revenue and a proportionate share of its operating income) which competes with any business of the Company or any entity owned by it anywhere in the world; provided, however, that the Executive shall be permitted to acquire a stock interest in such a corporation provided such stock is publicly traded and the stock so acquired does not represent more than one percent of the outstanding shares of such corporation.

(b) During the Term and for a period of two years following any termination of the Executive's employment, the Executive shall not, directly or indirectly, on her own behalf or on behalf of any other person or entity, whether as an owner, employee, service provider or otherwise, solicit or induce any person who is or was employed by, or providing consulting services to, the Company or any of its subsidiaries during the twelve-month period prior to the date of such termination, to terminate their employment or consulting relationship with the Company or any such subsidiary.

(c) In the event the agreement in this Section 7 shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too great a period of time or over too great a geographical area or by reason of its being too extensive in any other respect, it shall be interpreted to extend only over the maximum period of time for which it may be enforceable, and/or over the maximum geographical area as to which it may be enforceable and/or to the maximum extent in all other respects as to which it may be enforceable, all as determined by such court in such action.

8. Nondisclosure of Proprietary Information.

(a) Except as required in the faithful performance of the Executive's duties hereunder or pursuant to subsection (c), the Executive shall, in perpetuity, maintain in confidence and shall not directly, indirectly or otherwise, use, disseminate, disclose or publish, or use for her benefit or the benefit of any person, firm, corporation or other entity any confidential or proprietary information or trade secrets of or relating to the Company, including, without limitation, information with respect to the Company's operations, processes, products, inventions, business practices, finances, principals, vendors, suppliers, customers, potential customers, marketing methods, costs, prices, contractual relationships, regulatory status, compensation paid to employees or other terms of employment, except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this Section 8, or deliver to any person, firm, corporation or other entity any document, record, notebook, computer program or similar repository of or containing any such confidential or proprietary information or trade secrets. The parties hereby stipulate and agree that as between them the foregoing matters are important, material and confidential proprietary information and trade secrets and affect the successful conduct of the businesses of the Company (and any successor or assignee of the Company).

(b) Upon termination of the Executive's employment with the Company for any reason, the Executive shall promptly deliver to the Company all correspondence, drawings, manuals, letters, notes, notebooks, reports, programs, plans, proposals, financial documents, or any other documents concerning the Company's customers, business plans, marketing strategies, products or processes and/or which contain proprietary information or trade secrets.

(c) The Executive may respond to a lawful and valid subpoena or other legal process but shall give the Company the earliest possible notice thereof, shall, as much in advance of the return date as possible, make available to the Company and its counsel the documents and other information sought and shall assist such counsel in resisting or otherwise responding to such process.

9. Injunctive Relief. It is recognized and acknowledged by the Executive that a breach of the covenants contained in Sections 7 and 8 will cause irreparable damage to the Company and its goodwill, the exact amount of which will be difficult or impossible to ascertain, and that the remedies at law for any such breach will be inadequate. Accordingly, the Executive agrees that in the event of a breach of any of the covenants contained in Sections 7 and 8, in addition to any other remedy which may be available at law or in equity, the Company shall be entitled to specific performance and injunctive relief.

10. Survival. The expiration or termination of the Term shall not impair the rights or obligations of any party hereto which shall have accrued hereunder prior to such expiration.

11. Binding on Successors. This Agreement shall be binding upon and inure to the benefit of the Company, the Executive and their respective successors, assigns, personnel and legal representatives, executors, administrators, heirs, distributees, devisees, and legatees, as applicable.
12. Governing Law. This Agreement shall be governed, construed, interpreted and enforced in accordance with the substantive laws of the State of Ohio.
13. Validity. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.
14. Notices. Any notice, request, claim, demand, document or other communication hereunder to any party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by telex, telecopy, or certified or registered mail, postage prepaid, as follows:
- (a) If to the Company, to:
- TransDigm Group Incorporated
The Tower at Erieview
1301 E. 9th Street, Suite 3000
Cleveland, Ohio 44114
Attention: Kevin Stein, CEO
- (b) If to the Executive, to her at the address set forth below under her signature;
- or at any other address as any party shall have specified by notice in writing to the other party in accordance with this Section 14.
15. Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same agreement.
16. Entire Agreement; Prior Employment Agreement. The terms of this Agreement, together with the Equity Compensation Agreements are intended by the parties to be the final expression of their agreement with respect to the employment of the Executive by the Company and may not be contradicted by evidence of any prior or contemporaneous agreement. The parties further intend that this Agreement, and the aforementioned contemporaneous documents, shall constitute the complete and exclusive statement of its terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative, or other legal proceeding to vary the terms of this Agreement.
17. Amendments; Waivers. This Agreement may not be modified, amended, or terminated except by an instrument in writing, signed by the Executive and the Chief Executive Officer. By an instrument in writing similarly executed, the Executive or the Company may waive compliance by the other party or parties with any provision of this Agreement that such other party was or is obligated to comply with or perform; provided, however, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy or power hereunder shall preclude any other or further exercise of any other right, remedy or power provided herein or by law or in equity.
18. No Inconsistent Actions. The parties hereto shall not voluntarily undertake or fail to undertake any action or course of action inconsistent with the provisions or essential intent of this Agreement. Furthermore, it is the intent of the parties hereto to act in a fair and reasonable manner with respect to the interpretation and application of the provisions of this Agreement.
19. Arbitration. Any dispute or controversy arising under or in connection with this Agreement shall be settled exclusively by arbitration, conducted before a panel of three arbitrators in Cleveland, Ohio, in accordance with the rules of the American Arbitration Association then in effect. Judgment may be entered on the arbitrator's award in any court having jurisdiction; provided, however, that the Company shall be entitled to seek a restraining order or injunction in any court of competent jurisdiction to prevent any continuation of any violation of the provisions of Section 7 or 8 of this Agreement and the Executive hereby consents that such restraining order or injunction may be granted without the necessity of the Company's posting any bond; and provided further, that the Executive shall be entitled to seek specific performance of her right to be paid until the Date of Termination during the pendency of any dispute or controversy arising under or in connection with this Agreement. Each of the parties hereto shall bear its share of the fees and expenses of any arbitration hereunder.

20. Indemnification and Insurance; Legal Expenses. During the Term and so long as the Executive has not breached any of her obligations set forth in Sections 7 and 8, the Company shall indemnify the Executive to the fullest extent permitted by the laws of the State of Delaware, as in effect at the time of the subject act or omission, and shall advance to the Executive reasonable attorneys' fees and expenses as such fees and expenses are incurred (subject to an undertaking from the Executive to repay such advances if it shall be finally determined by a judicial decision which is not subject to further appeal that the Executive was not entitled to the reimbursement of such fees and expenses) and he shall be entitled to the protection of any insurance policies the Company shall elect to maintain generally for the benefit of its directors and officers ("Directors and Officers Insurance") against all costs, charges and expenses incurred or sustained by her in connection with any action, suit or proceeding to which he may be made a party by reason of her being or having been a director, officer or employee of the Company or any of its subsidiaries or her serving or having served any other enterprise as a director, officer or employee at the request of the Company (other than any dispute, claim or controversy arising under or relating to this Agreement). The Company covenants to maintain during the Term for the benefit of the Executive (in her capacity as an officer and director of the Company) Directors and Officers Insurance providing customary benefits to the Executive.

(SIGNATURE PAGE FOLLOWS)

IN WITNESS WHEREOF, the parties have executed this Agreement on the date and the year first above written.

TRANSDIGM GROUP INCORPORATED



By: _____
Name: Kevin Stein
Title: Chief Executive Officer

EXECUTIVE



Halle Terrion

AMENDMENT TO EMPLOYMENT AGREEMENT

THIS AMENDMENT TO EMPLOYMENT AGREEMENT (this "Amendment"), dated as of November 15, 2021, is made by and between TransDigm Group Incorporated, a Delaware corporation (the "Company"), and Halle Martin (fka Halle Terrion) ("Executive").

WHEREAS, the Company and Executive are parties to an Employment Agreement (the "Employment Agreement") setting forth certain terms and conditions of Executive's employment with the Company; and

WHEREAS, the Company and Executive desire to amend the Employment Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing and of the respective covenants and agreements set forth below, the parties hereto agree as follows:

1. Amendments. Section 6(b)(iii) of the Employment Agreement is hereby deleted and restated in its entirety as follows:

(iii) 18.0 times the difference of (A) the Monthly COBRA Continuation Coverage Rate determined as of the Date of Termination for the Executive's applicable health plan coverage as in effect on such date, less (B) the monthly cost to Executive that is being charged for such coverage as of the Date of Termination.

2. Counterparts. This Amendment may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same agreement.

3. Governing Law. This Amendment shall be governed, construed, interpreted and enforced in accordance with the substantive laws of the State of Ohio.

4. Full Force and Effect. Except as expressly amended by this Amendment, all other terms and conditions of the Employment Agreement shall remain in full force and effect and unmodified hereby.

IN WITNESS WHEREOF, the parties have executed this Amendment on the date and year first above written.

TRANSDIGM GROUP INCORPORATED

By: /s/ Kevin Stein
Name: Kevin Stein
Title: Chief Executive Officer

EXECUTIVE

/s/ Halle Martin
HALLE MARTIN

**FORM OF OPTION AGREEMENT (2022) – EXECUTIVE OFFICER AND DIRECTOR FIVE-YEAR GRANT AND EXTENSION GRANT
STOCK OPTION GRANT NOTICE AND STOCK OPTION AGREEMENT**

TransDigm Group Incorporated, a Delaware corporation (the “**Company**”), pursuant to its 2014 Stock Option Plan (the “**Plan**”), hereby grants to the holder listed below (“**Participant**”), an option to purchase the number of shares of the Company’s common stock, par value \$0.01 (“**Stock**”), set forth below (the “**Option**”). This Option is subject to all of the terms and conditions set forth herein and in the Stock Option Agreement, including any applicable country-specific terms, attached hereto as Exhibit A (the “**Agreement**”) and the Plan, which are incorporated herein by reference. Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Grant Notice and the Stock Option Agreement.

Participant: _____
Grant Date: _____
Exercise Price per Share: \$ _____
Total Number of Shares Subject to the Option: _____ Shares
Expiration Date: _____

Type of Option: Incentive Stock Option Non-Qualified Stock Option

Vesting Schedule: Subject to the terms of the Stock Option Agreement (including without limitation all exhibits thereto), the Option shall be eligible to become exercisable upon the achievement of performance objectives over the period set forth in Exhibit B hereto (provided that the Participant is an Eligible Person (as defined in the Plan) at all times during the period beginning on the Grant Date and ending on the applicable vesting date):

By his or her signature, the Participant agrees to be bound by the terms and conditions of the Plan, the Stock Option Agreement and this Grant Notice. The Participant has reviewed the Agreement, including any applicable country-specific terms, the Plan and this Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Grant Notice and fully understands all provisions of this Grant Notice, the Agreement and the Plan. The Participant agrees that as a condition to receiving the Option, the Participant shall comply with the Stock Retention Guidelines set forth on Exhibit C. The Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions arising under the Plan or relating to the Option.

TRANSDIGM GROUP INCORPORATED

By: _____
 Print Name: _____
 Title: _____
 Address: _____

PARTICIPANT

By: _____
 Print Name: _____
 Address: _____

EXHIBIT A
TO STOCK OPTION GRANT NOTICE
STOCK OPTION AGREEMENT

Pursuant to the Stock Option Grant Notice (the “**Grant Notice**”) to which this Stock Option Agreement, including the Appendix containing any applicable country-specific provisions (together, this “**Agreement**”), is attached, TransDigm Group Incorporated, a Delaware corporation (the “**Company**”), has granted to the Participant an option (the “**Option**”)¹ under the Company’s 2014 Stock Option Plan (the “**Plan**”) to purchase the number of shares of Stock indicated in the Grant Notice.

ARTICLE I.

GENERAL

1.1 **Defined Terms.** Wherever the following terms are used in this Agreement they shall have the meanings specified below, unless the context clearly indicates otherwise. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan and/or the Grant Notice.

(a) “**Administrator**” shall mean the Board or the Compensation Committee or other committee of the Board responsible for conducting the general administration of the Plan in accordance with Section 3 of the Plan; provided that if the Participant is an Independent Director, “Administrator” shall mean the Board.

(b) “**Consultant**” shall mean an individual who renders services to the Company as a consultant and has been so designated by the Committee.

(c) “**Credit Agreement**” shall mean that certain credit agreement dated as of June 4, 2014 among TransDigm, Inc., TransDigm Group Incorporated and the lenders party thereto, as in effect as of the Grant Date and without reference to any amendment to the Credit Agreement made following the Grant Date.

(d) “**Diluted Shares**” as of a given date shall mean the total diluted weighted-average of common shares of the Company outstanding as of such date.

(e) “**EBITDA**” for a given fiscal year of the Company shall mean Consolidated EBITDA (as defined in the Credit Agreement) of the Company for such fiscal year on a pro forma basis adjusted for acquisitions or divestitures.

(f) “**Independent Director**” shall mean a non-employee director of the Company.

(g) “**Net Debt**” shall mean, as of the last day of a given fiscal year of the Company, the excess of (a) Consolidated Total Indebtedness (as defined in the Credit Agreement) of the Company over (b) the amount of cash and cash equivalents set forth on the Company’s balance sheet.

(h) “**Termination of Consultancy**” shall mean the time when the engagement of the Participant as a Consultant to the Company or a Subsidiary is terminated for any reason, with or without cause, including, but not by way of limitation, by resignation, discharge, death or retirement, but excluding: (i) terminations where there is a simultaneous employment or continuing employment of the Participant by the Company or any Subsidiary, and (ii) terminations where there is a simultaneous re-establishment of a consulting relationship or continuing consulting relationship between the Participant and the Company or any Subsidiary. The Administrator, in its absolute discretion, shall determine the effect of all matters and questions relating to Termination of Consultancy. Notwithstanding any other provision of the Plan, the Company or any Subsidiary has an absolute and unrestricted right to terminate a Consultant’s service at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in writing.

¹ For the avoidance of doubt, the term “Option” as used herein only describes options granted pursuant to the Stock Option Grant Notice to which this Agreement is an Exhibit.

(i) **“Termination of Directorship”** shall mean the time when the Participant, if he or she is or becomes an Independent Director, ceases to be a Director for any reason, including, but not by way of limitation, a termination by resignation, failure to be elected, death or retirement. The Board, in its sole and absolute discretion, shall determine the effect of all matters and questions relating to Termination of Directorship with respect to Independent Directors.

(j) **“Termination of Employment”** shall mean the time when the employee-employer relationship between the Participant and the Company or any Subsidiary is terminated for any reason, with or without Cause, including, but not by way of limitation, a termination by resignation, discharge, death, disability or retirement; but excluding: (i) terminations where there is a simultaneous reemployment or continuing employment of the Participant by the Company or any Subsidiary, and (ii) terminations where there is a simultaneous establishment of a consulting relationship or continuing consulting relationship between the Participant and the Company or any Subsidiary. The Administrator, in its absolute discretion, shall determine the effect of all matters and questions relating to Termination of Employment, including, but not by way of limitation, the question of whether a particular leave of absence constitutes a Termination of Employment; provided, however, that, notwithstanding any other provision of this Agreement, if this Option is an Incentive Stock Option, unless otherwise determined by the Administrator in its discretion, a leave of absence, change in status from an employee to an independent contractor or other change in the employee-employer relationship shall constitute a Termination of Employment if, and to the extent that, such leave of absence, change in status or other change interrupts employment for the purposes of Section 422(a)(2) of the Code and the then applicable regulations and revenue rulings under said Section.

(k) **“Termination of Services”** shall mean the time when (i) every relationship between the Participant and the Company has been terminated by a Termination of Consultancy, Termination of Directorship and/or Termination of Employment, as applicable, and (ii) the Participant is no longer an Eligible Person under the Plan. For purposes of the Option, the Participant’s Termination of Services will be deemed to occur as of the date the Participant is no longer actively providing services to the Company or any Subsidiary (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment or other laws in the jurisdiction where the Participant is employed or the terms of the Participant’s employment or service agreement, if any), and unless otherwise determined by the Company, (i) the Participant’s right to vest in the Option under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., the Participant’s period of service would not include any contractual notice period or any period of “garden leave” or similar period mandated under employment laws or common law in the jurisdictions where the Participant provides services or the terms of the Participant’s employment or service agreement, if any); and (ii) the period (if any) during which the Participant may exercise the Option after such Termination of Services will commence on the date the Participant ceases to actively provide services and will not be extended by any notice period mandated under employment laws or common law in the jurisdiction where the Participant provides services or the terms of the Participant’s employment or service agreement, if any; the Company shall have the exclusive discretion to determine when the Participant is no longer actively providing services for purposes of the Options (including whether the Participant may still be considered to be providing services while on a leave of absence).

1.2 **Incorporation of Terms of Plan.** The Option is subject to the terms and conditions of the Plan which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II.

GRANT OF OPTION

2.1 **Grant of Option.** In consideration of the Participant’s future employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the Grant Date set forth in the Grant Notice (the **“Grant Date”**), the Company irrevocably grants to the Participant the Option to purchase any part or all of an aggregate of the number of shares of Stock set forth in the Grant Notice, subject to the terms and conditions set forth in the Plan and this Agreement. Unless designated as a Non-Qualified Stock Option in the Grant Notice, the Option shall be an Incentive Stock Option to the maximum extent permitted by law.

2.2 Exercise Price. The exercise price of the shares of Stock subject to the Option shall be as set forth in the Grant Notice, without commission or other charge; *provided, however*, that the price per share of the shares of Stock subject to the Option shall not be less than 100% of the Fair Market Value of a share of Stock on the Grant Date. Notwithstanding the foregoing, if this Option is designated as an Incentive Stock Option and the Participant owns (within the meaning of Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of stock of the Company or any “subsidiary corporation” of the Company or any “parent corporation” of the Company (each within the meaning of Section 424 of the Code), the price per share of the shares of Stock subject to the Option shall not be less than 110% of the Fair Market Value of a share of Stock on the Grant Date.

[ADDITIONAL PROVISION FOR ALL DIRECTORS: Notwithstanding anything to the contrary contained in this Option Agreement, the Plan or any applicable plan providing for cash dividend equivalent rights, if an extraordinary dividend is declared on the Stock following the date of this Amendment and if the holders of Options of the Company generally are entitled to receive dividend equivalent payments with respect thereto, then the exercise price of the Option shall be reduced by the amount per share of such extraordinary dividend; provided, however, that if as a result of the foregoing reduction, the exercise price would be below zero, then this provision will apply only to the extent the exercise price would be zero and the remainder of any dividend equivalents related to an extraordinary dividend will be paid in cash.]

2.3 Consideration to the Company. In consideration of the grant of the Option by the Company, the Participant agrees to render faithful and efficient services to the Company or any Subsidiary. Nothing in the Plan or this Agreement shall confer upon the Participant any right to continue in the employ or service of the Company or any Subsidiary or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of the Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and the Participant.

ARTICLE III.

PERIOD OF EXERCISABILITY

3.1 Commencement of Exercisability.

(a) Subject to Sections 3.1(b), 3.1(c) and 3.3, the Option shall become vested and exercisable in such amounts and at such times as set forth in the Grant Notice.

(b) No portion of the Option which has not become vested and exercisable at the date of the Participant’s Termination of Services shall thereafter become vested and exercisable, except as may be otherwise provided by the Administrator or as set forth in a written agreement between the Company and the Participant. **[ALTERNATE PROVISION FOR EXECUTIVE VICE PRESIDENTS AND EXECUTIVE OFFICERS:** No portion of the Option which has not become vested and exercisable at the date of the Participant’s Termination of Services shall thereafter become vested and exercisable, except as follows or as may be otherwise provided by the Administrator or as set forth in a written agreement between the Company and the Participant:

If the Participant incurs a Termination of Services under any of the circumstances described in Section 5(a)(i) (death) of that certain Employment Agreement between the Participant and the Company effective _____ (the “Employment Agreement”), Section 5(a)(ii) (Disability) of the Employment Agreement, Section 5(a)(iv) (Resignation for Good Reason of the Employment Agreement) or Section 5(a)(v) (Termination without Cause) of the Employment Agreement or if the Participant retires from employment after at least 15 years of service after age 60 or after at least ten years of service after age 65, in each such case vesting will continue after termination of employment as provided below:

Termination Date	Percent of Remaining Options That May Continue to Vest
Prior to October 1, 2022	0%
On or after October 1, 2022 but prior to October 1, 2023	20%
On or after October 1, 2023 but prior to October 1, 2024	40%
On or after October 1, 2024 but prior to October 1, 2025	60%
On or after October 1, 2025 but prior to October 1, 2026	80%
On or after October 1, 2026	100%

The percentage of remaining Options permitted to vest will be spread ratably over the vesting schedule.]

(c) Notwithstanding Section 3.1(a) of this Agreement and Section 8 of the Plan (but subject to Section 3.1(b) of this Agreement), in the event of a Change in Control, Options shall become fully vested and exercisable. Notwithstanding the foregoing, the Administrator may, in good faith and in such manner as it may deem equitable, in its sole discretion, adjust the foregoing Fair Market Value requirements in the event of a dividend or other distribution (whether in the form of cash, Stock, other securities or property), recapitalization, reclassification, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of Stock or other securities of the Company, issuance of warrants or other rights to purchase Stock or other securities of the Company, or any unusual or nonrecurring transactions or events affecting the Company or the financial statements of the Company if the adjustment is determined by the Administrator to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to the Option. For purposes of this Section 3.1, shall take into account the consideration received by the stockholders in connection with a Change in Control or in connection with any other sale of common stock or other equity interests in the Company or any Subsidiary, after taking into account all post-closing adjustments relating to a Change in Control, and assuming the exercise of all vested options and warrants outstanding as of the effective date of such Change in Control (after giving effect to any dilution of securities or instruments arising in connection with such Change in Control); *provided however*, that if the stockholders retain any portion of the common stock following such Change in Control or other sale, the Fair Market Value of such portion of the retained common stock immediately following such Change in Control or other sale shall be deemed “consideration received” for purposes of calculating the proceeds and *provided further* that the Fair Market Value of any non-cash consideration (including stock) received in connection with a Change in Control shall be determined as of the date of such Change in Control.

3.2 Duration of Exercisability. The installments provided for in the vesting schedule set forth in the Grant Notice are cumulative. Each such installment which becomes vested and exercisable pursuant to the vesting schedule set forth in the Grant Notice shall remain vested and exercisable until it becomes unexercisable under Section 3.3.

3.3 Expiration of Option. The Option may not be exercised to any extent by anyone after the first to occur of the following events:

(a) The expiration of ten years from the Grant Date; or

(b) If this Option is designated as an Incentive Stock Option and the Participant owned (within the meaning of Section 424(d) of the Code), at the time the Option was granted, more than 10% of the total combined voting power of all classes of stock of the Company or any “subsidiary corporation” of the Company or any “parent corporation” of the Company (each within the meaning of Section 424 of the Code), the expiration of five years from the Grant Date; or

(c) The opening of business on the day of the Participant's Termination of Services by reason of a termination by the Company or a Subsidiary for Cause; **[ALTERNATIVE PROVISION FOR EXECUTIVE VICE PRESIDENTS AND EXECUTIVE OFFICERS:** The opening of business on the day of the Participant's Termination of Services by reason of a termination by the Company or a Subsidiary for Cause (as defined in the Participant's employment agreement, if applicable), unless the Committee, in its discretion, determines that a longer period is appropriate;] or

(d) The expiration of six months from the date of the Participant's Termination of Services, unless such termination occurs by reason of the Participant's death, Disability or retirement (pursuant to Section 3.3(e)) or is a termination by the Company or a Subsidiary for Cause (as defined in Participant's employment or service agreement, if applicable), *provided, however*, that any portion of this Option that is an Incentive Stock Option shall cease to be an Incentive Stock Option on the expiration of three months from the Participant's Termination of Services (and shall thereafter be a Non-Qualified Stock Option), *provided, further*, that to the extent that the Participant is prohibited from selling shares of Stock pursuant to the Company's insider trading policy at all times during such six-month period, with the exception of an open trading window of less than seven days, the Option shall expire on the later of (i) the seventh day following the opening of the first open trading window thereafter or (ii) the first anniversary of the Participant's Termination of Services; **[ALTERNATIVE PROVISION FOR EXECUTIVE VICE PRESIDENTS AND EXECUTIVE OFFICERS:** The expiration of six months from the date of the Participant's Termination of Services, unless such termination occurs by reason of (i) the Participant's death, (ii) the Participant's Disability, (iii) the Participant's retirement (pursuant to Section 3.3(e)), (iv) the Participant's termination for Cause (as defined in the Participant's employment agreement, if applicable) or (v) if the Participant has an employment agreement that defines a termination for "cause" and/or "Good Reason," a termination by the Company or a Subsidiary without Cause (as defined in the Participant's employment agreement) or a termination by the Participant for Good Reason (as defined in the Participant's employment agreement, if applicable), *provided, however*, that any portion of this Option that is an Incentive Stock Option shall cease to be an Incentive Stock Option on the expiration of three months from the Participant's Termination of Services (and shall thereafter be a Non-Qualified Stock Option), *provided, further*, that to the extent that the Participant is prohibited from selling shares of Stock pursuant to the Company's insider trading policy at all times during such six-month period, with the exception of an open trading window of less than seven days, the Option shall expire on the seventh day following the opening of the first open trading window thereafter;] or

(e) The expiration of one year from the date of the Participant's Termination of Services by reason of (i) the Participant's death or Disability; or (ii) the retirement, after a minimum of ten years of service, of a Participant who is at least 55 years old, *provided, however*, that to the extent that the Participant is prohibited from selling shares of Stock pursuant to the Company's insider trading policy at all times during such one-year period, with the exception of an open trading window of less than seven days, the Option shall expire on the seventh day following the opening of the first open trading window thereafter. **[ALTERNATIVE PROVISION FOR EXECUTIVE VICE PRESIDENTS AND EXECUTIVE OFFICERS:** The expiration of one year from the date of the Participant's Termination of Services by reason of the retirement, after a minimum of ten years of service, of a Participant who is at least 55 years old, *provided, however*, that to the extent that the Participant is prohibited from selling shares of Stock pursuant to the Company's insider trading policy at all times during such one-year period, with the exception of an open trading window of less than seven days, the Option shall expire on the seventh day following the opening of the first open trading window thereafter; or]

[ADDITIONAL PROVISION FOR EXECUTIVE VICE PRESIDENTS AND EXECUTIVE OFFICERS: (f) the expiration date set forth in clause (a), (i) if the Participant has an employment agreement that defines a termination for "Cause" and/or "Good Reason," and upon a Participant's Termination of Services by the Company or a Subsidiary without Cause (as defined in Participant's employment agreement) or a Termination of Services by the Participant for Good Reason (as defined in Participant's employment agreement) or (ii) upon the Participant's death or Disability or (iii) upon the Participant's retirement from employment after at least 15 years of service after age 60 or after at least ten years of service after age 65.

Notwithstanding the foregoing, if any Option vests after the Participant's Termination of Services for reasons set forth herein pursuant to Section 3.1 and the Participant has a limit of six months or one year following such Termination of Services to exercise the Option pursuant to paragraph (d) or (e), the Participant shall have six months after the Option vests to exercise such Option.]

3.4 Tax Obligations. The Participant acknowledges that, to the extent that the aggregate Fair Market Value (determined as of the time the Option is granted) of all shares of Stock with respect to which Incentive Stock Options, including the Option, are exercisable for the first time by the Participant in any calendar year exceeds \$100,000, the Option and such other options shall be Non-Qualified Stock Options to the extent necessary to comply with the limitations imposed by Section 422(d) of the Code. The Participant further acknowledges that the rule set forth in the preceding sentence shall be applied by taking the Option and other "incentive stock options" into account in the order in which they were granted, as determined under Section 422(d) of the Code and the Treasury Regulations thereunder. The Participant acknowledges that an Incentive Stock Option exercised more than three months after the Participant's Termination of Employment, other than by reason of death or Disability, will be taxed as a Non-Qualified Stock Option.

Regardless of any action the Company or Participant's employer, whether it be the Company or a Subsidiary (the "**Employer**") takes with respect to any or all income tax, social insurance, payroll tax, fringe benefits, payment on account or other tax related items related to Participant's participation in the Plan and legally applicable to Participant ("**Tax-Related Items**"), the Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains the Participant's responsibility and may exceed the amount actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option, including, but not limited to, the grant, vesting or exercise of the Option, the subsequent sale of shares of Stock acquired pursuant to such exercise and the receipt of any dividends; and (b) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant has become subject to tax in more than one jurisdiction between the Grant Date and the date of any relevant taxable or tax withholding event, as applicable, the Participant acknowledges that the Company and/or the Employer (or former Employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the relevant taxable or tax withholding event, as applicable, the Participant will pay or make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, Participant authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy the obligations with regard to all Tax-Related Items by one or a combination of the following: (i) withholding from the Participant's wages or other cash compensation paid to the Participant by the Company and/or the Employer; or (ii) withholding from proceeds of the sale of shares of Stock acquired at exercise of the Option either through a voluntary sale or through a mandatory sale arranged by the Company (on the Participant's behalf pursuant to this authorization); or (iii) withholding in shares of Stock to be issued at exercise of the Option.

Depending on the withholding method, the Company and/or the Employer may withhold or account for Tax-Related Items by considering statutory withholding rates or other withholding rates, including maximum applicable rates in the Participant's jurisdiction. If the Tax-Related Items are satisfied by withholding in shares of Stock, for tax purposes, the Participant will be deemed to have been issued the full number of shares of Stock subject to the exercised Option, notwithstanding that a number of shares of Stock are held back solely for the purpose of satisfying the Tax-Related Items.

Finally, the Participant shall pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the shares of Stock or the proceeds of the sale of shares of Stock, if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

ARTICLE IV.
EXERCISE OF OPTION

4.1 Person Eligible to Exercise. Except as provided in Section 5.2(b), during the lifetime of the Participant, only the Participant may exercise the Option or any portion thereof. After the death of the Participant, any exercisable portion of the Option may, prior to the time when the Option becomes unexercisable under Section 3.3, be exercised by the Participant's personal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

4.2 Partial Exercise. Any exercisable portion of the Option or the entire Option, if then wholly exercisable, may be exercised in whole or in part at any time prior to the time when the Option or portion thereof becomes unexercisable under Section 3.3.

4.3 Manner of Exercise. The Option, or any exercisable portion thereof, may be exercised solely by delivery to the Secretary of the Company (or any third party administrator or other person or entity designated by the Company) of all of the following prior to the time when the Option or such portion thereof becomes unexercisable under Section 3.3:

(a) An Exercise Notice in a form specified by the Administrator, stating that the Option or portion thereof is thereby exercised, such notice complying with all applicable rules established by the Administrator;

(b) The receipt by the Company of full payment for the shares of Stock with respect to which the Option or portion thereof is exercised, including payment of any applicable Tax-Related Items, which may be in one or more of the forms of consideration permitted under Section 4.4;

(c) Any other written representations as may be required in the Administrator's reasonable discretion to evidence compliance with the Securities Act or any other applicable law, rule, or regulation; and

(d) In the event the Option or portion thereof shall be exercised pursuant to Section 4.1 by any person or persons other than the Participant, appropriate proof of the right of such person or persons to exercise the Option.

Notwithstanding any of the foregoing, the Company shall have the right to specify all conditions of the manner of exercise, which conditions may vary by country and which may be subject to change from time to time.

4.4 Method of Payment. Payment of the exercise price, and any applicable Tax-Related Items, shall be by any of the following, or a combination thereof, at the election of the Participant:

(a) Cash;

(b) Check;

(c) Broker Assisted Cash less Exercise. With the consent of the Administrator, delivery of a notice that the Participant has placed a market sell order with a broker with respect to shares of Stock then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the aggregate exercise price; *provided*, that payment of such proceeds is then made to the Company upon settlement of such sale;

(d) Share Surrender. With the consent of the Administrator, surrender of other shares of Stock which (i) in the case of shares of Stock acquired from the Company, have been owned by the Participant for more than six months on the date of surrender (or such other minimum length of time as the Administrator determines from time to time to be necessary to avoid adverse accounting consequences or violation of any applicable law, rule or regulation), and (ii) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the shares of Stock with respect to which the Option or portion thereof is being exercised; or

- (e) **Net Exercise.** With the consent of the Administrator, surrendered shares of Stock issuable upon the exercise of the Option having a Fair Market Value on the date of exercise equal to the aggregate exercise price of the shares of Stock with respect to which the Option or portion thereof is being exercised.

4.5 **Conditions to Issuance of Stock Certificates.** The shares of Stock deliverable upon the exercise of the Option, or any portion thereof, may be either previously authorized but unissued shares of Stock or issued shares of Stock which have then been reacquired by the Company. Such shares of Stock shall be fully paid and nonassessable. The Company shall not be required to issue or deliver any shares of Stock purchased upon the exercise of the Option or portion thereof prior to fulfillment of all of the following conditions:

- (a) The admission of such shares of Stock to listing on all stock exchanges on which such Stock is then listed;
- (b) The completion of any registration or other qualification of such shares of Stock under any state or federal law or under rulings or regulations of the Securities and Exchange Commission or of any other governmental regulatory body, which the Administrator shall, in its absolute discretion, deem necessary or advisable;
- (c) The obtaining of any approval or other clearance from any state or federal governmental agency which the Administrator shall, in its absolute discretion, determine to be necessary or advisable;
- (d) The receipt by the Company of full payment for such shares of Stock, including payment of any applicable withholding tax, which may be in one or more of the forms of consideration permitted under Section 4.4; and
- (e) The lapse of such reasonable period of time following the exercise of the Option as the Administrator may from time to time establish for reasons of administrative convenience.

4.6 **Rights as Stockholder.** The holder of the Option shall not be, nor have any of the rights or privileges of, a stockholder of the Company in respect of any shares of Stock purchasable upon the exercise of any part of the Option unless and until such shares of Stock shall have been issued by the Company to such holder (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment will be made for a dividend or other right for which the record date is prior to the date the shares of Stock are issued, except as provided in Section 8 of the Plan.

ARTICLE V.

OTHER PROVISIONS

5.1 **Administration.** The Administrator shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Participant, the Company and all other interested persons. No member of the Committee or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the Option.

5.2 **Option Transferability.**

(a) Except as otherwise set forth in Section 5.2(b), (i) the Option may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the shares of Stock underlying the Option have been issued, and all restrictions applicable to such shares of Stock have lapsed. Neither the Option nor any interest or right therein shall be liable for the debts, contracts or engagements of the Participant or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence; and (ii) during the lifetime of the Participant, only the Participant may exercise the Option or any portion thereof. After the death of the Participant, any exercisable portion of the Option may, prior to the time when the Option becomes unexercisable under Section 3.3, be exercised by the Participant's personal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

(b) Notwithstanding the foregoing, with respect to participants who are corporate officers or operating presidents, the Administrator may permit any portion of the Option that is not an Incentive Stock Option to be transferred to, exercised by and paid to certain persons or entities related to such Participant, including but not limited to members of such Participant's family, charitable institutions or trusts or other entities whose beneficiaries or beneficial owners are members of such Participant's family and/or charitable institutions, or to such other persons or entities as may be expressly approved by the Administrator, pursuant to such conditions and procedures as the Administrator may establish. Any permitted transfer shall be subject to the condition that the Administrator receive evidence satisfactory to it that the transfer is being made for estate and/or tax planning purposes (or to a "blind trust" in connection with such Participant's termination of employment or service with the Company or a Subsidiary to assume a position with a governmental, charitable, educational or similar non-profit institution) and on a basis consistent with the Company's lawful issue of securities.

5.3 Adjustments. The Participant acknowledges that the Option is subject to modification and termination in certain events as provided in this Agreement and Section 8 of the Plan.

5.4 Appendix. Notwithstanding any provisions in this Agreement, the Option grant shall be subject to any additional or different terms and conditions set forth in the attached Appendix to this Option Agreement for the Participant's country (the "**Appendix**"). Moreover, if the Participant relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to the Participant, to the extent the Company determines that the application of such terms and conditions is necessary or advisable to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

5.5 Insider Trading/Market Abuse Laws. The Participant understands that he or she may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including but not limited to the United States, the Participant's country, the Service Provider's country, and the country in which the shares of Stock may be listed, which may affect the Participant's ability, directly or indirectly, to purchase or sell or attempt to sell or otherwise dispose of shares of Stock, rights to shares of Stock (e.g., Options), or rights linked to the value of shares of Stock, during such times as the Participant is considered to have "inside information" regarding the Company (as defined by the laws and/or regulation in the applicable jurisdiction(s)). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders the Participant placed before possessing inside information. Furthermore, the Participant may be prohibited from (i) disclosing inside information to any third party, including fellow employees or service providers (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them to otherwise buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. The Participant is responsible for ensuring compliance with any applicable restrictions and the Participant should consult with his or her personal legal advisor on this matter.

5.6 No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making recommendations regarding the Participant's participation in the Plan, or the Participant's acquisition or sale of shares of Stock acquired upon exercise. The Participant should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any actions related to the Plan.

5.7 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company, and any notice to be given to the Participant shall be addressed to the Participant at the most recent address set forth in the Company's books and records. By a notice given pursuant to this Section 5.7, either party may hereafter designate a different address for notices to be given to that party. Any notice which is required to be given to the Participant shall, if the Participant is then deceased, be given to the person entitled to exercise his or her Option pursuant to Section 4.1 by written notice under this Section 5.7. Any notice shall be deemed duly given when sent via email or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

5.8 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

5.9 Governing Law and Venue; Severability. The validity, interpretation, construction and performance of this Agreement, and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the state of Delaware, without giving effect to principles of conflicts of law. For purposes of litigating any dispute that may arise directly or indirectly from this Agreement, the parties hereby submit and consent to the exclusive jurisdiction of the state of Delaware and agree that any such litigation shall be conducted only in the courts of Delaware or the federal courts of the United States located in Delaware and no other courts. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect.

5.10 Conformity to Securities Laws. The Participant acknowledges that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the U.S. Securities Act and the Exchange Act and any and all regulations and rules promulgated by the U.S. Securities and Exchange Commission thereunder, and any U.S. or non-U.S. securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Option is granted and may be exercised, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

5.11 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Committee or the Board, *provided*, that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Option in any material way without the prior written consent of the Participant.

5.12 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in Section 5.2, this Agreement shall be binding upon the Participant and his or her heirs, executors, administrators, successors and assigns.

5.13 Notification of Disposition. If this Option is designated as an Incentive Stock Option, the Participant shall give prompt notice to the Company of any disposition or other transfer of any shares of Stock acquired under this Agreement if such disposition or transfer is made (a) within two years from the Grant Date with respect to such shares of Stock or (b) within one year after the transfer of such shares of Stock to him. Such notice shall specify the date of such disposition or other transfer and the amount realized, in cash, other property, assumption of indebtedness or other consideration, by the Participant in such disposition or other transfer.

5.14 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if the Participant is subject to Section 16 of the Exchange Act, the Plan, the Option and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by applicable law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

5.15 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon the Participant any right to continue to serve as an employee or other service provider of the Company or any of its Subsidiaries. The terms of the Participant's employment or service relationship are determined by the Company or the Employer's policy, and by the terms of any employment or service contract to which the Participant might be party. This Agreement creates no rights to continued employment, or any other service relationship, nor does it limit the discretion the Company or the Employer would otherwise have to terminate Participant's employment or other service relationship, with or without Cause. The Option and any shares of Stock acquired pursuant to the Plan (including the value and income of the same) are not part of normal or expected compensation or salary, including, but not limited to, for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments.

5.16 Electronic Delivery and Participation. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or any third party designated by the Company.

5.17 Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the Options and on any shares of Stock acquired upon exercise of the Option, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

5.18 No Right to Damages. Nothing in the Grant Notice, this Agreement or the Plan gives the Participant a right to receive damages for any portion of the Option that Participant might lose due to Company, Subsidiary or Committee decisions. The loss of potential profit from the Option will not constitute an element of damages in the event of Participant's Termination of Services for any reason, even if such Termination of Services violates an obligation of the Company or a Subsidiary.

5.19 Entire Agreement. The Plan, the Grant Notice and this Agreement (including all Exhibits thereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

5.20 Waiver. The Participant acknowledges that a waiver by the Company of any provision, or breach thereof, of this Agreement on any occasion shall not operate or be construed as a waiver of such provision on any other occasion or as a waiver of any other provision of this Agreement, or of any subsequent breach by the Participant or any other participant.

5.21 Section 409A. Notwithstanding any other provision of the Plan, this Agreement or the Grant Notice, the Plan, this Agreement and the Grant Notice shall be interpreted in accordance with, and incorporate the terms and conditions required by, Section 409A of the U.S. Internal Revenue Code of 1986, as amended (together with any U.S. Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "**Section 409A**"). The Committee reserves the right (without the obligation to do so or to indemnify the Participant for the failure to do so) to adopt such amendments to the Plan, this Agreement or the Grant Notice or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate to exempt the Option from Section 409A or to comply with the requirements of Section 409A and thereby avoid the penalty taxes under Section 409A.

APPENDIX

COUNTRY-SPECIFIC PROVISIONS TO THE STOCK OPTION AGREEMENT

Terms and Conditions

This Appendix includes additional terms and conditions that govern the Option granted to the Participant under the Plan if the Participant resides or works in one of the countries listed below. If the Participant is a citizen or resident (or is considered as such for local law purposes) of a country other than the country in which the Participant is currently residing and/or working, or if the Participant relocates to another country after the grant of the Option, the Company shall, in its discretion, determine to what extent the country-specific terms contained herein shall be applicable to the Participant. Certain capitalized terms used but not defined in this Appendix have the meanings set forth in the Plan and/or the Agreement.

Notifications

This Appendix also includes information regarding exchange controls and certain other issues of which the Participant should be aware with respect to the Participant's participation in the Plan. The information is based on the securities, exchange control and other laws as of October 2019; however, such laws are often complex and change frequently. As a result, the Company strongly recommends that the Participant does not rely on the information in this Appendix as the only source of information relating to the consequences of the Participant's participation in the Plan because the information may be out of date at the time that Participant exercises the Option or sell shares of Stock acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to the Participant's particular situation and the Company is not in a position to assure the Participant of any particular result. Accordingly, the Participant is advised to seek appropriate professional advice as to how the relevant laws in the Participant's country may apply to the Participant's situation.

Finally, the Participant understands that if he or she is a citizen or resident of a country other than the one in which Participant is currently working, transfers employment after the grant date, or is considered a resident of another country for local law purposes, the information contained herein may not apply to the Participant, and the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply.

ALL COUNTRIES OUTSIDE OF THE UNITED STATES

Terms and Conditions

1. Nature of Grant. In accepting the Option, the Participant acknowledges and agrees that:
 - (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
 - (b) the grant of the Options is voluntary and occasional and does not create any contractual or other right to receive future grants of stock options, or benefits in lieu of stock options, even if stock options have been granted in the past;
 - (c) all decision with respect to future stock options or other grants, if any, will be at the sole discretion of the Company;
 - (d) the Participant's participation in the Plan shall not create a right to further employment or service relationship with the Company or the Employer and shall not interfere with the ability of the Company or the Employer to terminate the Participant's employment or service relationship at any time;

(e) the Participant is voluntarily participating in the Plan;

(f) the Options and the shares of Stock subject to the Options, and the income and value of the same, are extraordinary items that do not constitute compensation of any kind for services of any kind rendered to the Company or the Employer, and which is outside the scope of the Participant's employment or service contract, if any;

(g) the Options and the shares of Stock subject to the Options, and the income and value of the same are not intended to replace any pension rights or compensation;

(h) the Options and the shares of Stock subject to the Options, and the income and value of the same, are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, holiday pay, bonuses, long-service awards, leave-related payments, pension or retirement or welfare benefits or similar mandatory payments and in no event should be considered compensation for, or relating to, past services for the Company, the Employer of any Subsidiary;

(i) the Option grant and the Participant's participation in the Plan will not be interpreted to form an employment or service contract or relationship with the Company or a Subsidiary;

(j) unless otherwise agreed with the Company, the Options and the shares of Stock subject to the Option, and the income and value of the same, are not granted as consideration for, or in connection with, any service the Participant may provide as a director of a Subsidiary;

(k) the future value of the underlying shares of Stock is unknown, indeterminable and cannot be predicted with certainty;

(l) if the underlying shares of Stock do not increase in value, the Option will have no value;

(m) no claim or entitlement to compensation or damages shall arise from forfeiture of the Option resulting from the Participant's Termination of Services (for any reason whatsoever, and whether or not later found to be invalid or in breach of employment or other laws in the jurisdiction where the Participant renders services or the terms of the Participant's employment or service agreement, if any);

(n) unless otherwise provided in the Plan or by the Company in its sole discretion, the Options and the benefits evidenced by this Agreement do not create any entitlement to have the Options or any such benefit transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of Stock of the Company; and

(o) neither the Company, the Employer, nor any other Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the U.S. Dollar that may affect the value of the Option or of any amounts due to the Participant upon exercise of the Options or the subsequent sale of any shares of Stock acquired upon settlement.

2. **Language.** The Participant acknowledges that the Participant is sufficiently proficient in English or has consulted with an advisor who is sufficiently proficient in English so as to allow the Participant to understand the terms and conditions of this Agreement. Further, if the Participant has received this Agreement or any other document(s) related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

Data Privacy Information and Consent.

(a) Declaration of Consent. The Participant is declaring that he or she agrees with the data processing practices described herein and consents to the collection, processing and use of Data (as defined below) by the Company and the transfer of Data to the recipients mentioned below, including recipients located in countries which may not have a similar level of protection from the perspective of the Participant's country's data protection laws.

(b) Data Collection and Usage. The Company and the Employer collect, process and use certain personal information about the Participant, including but not limited to his or her name, home address, telephone number, email address, date of birth, social insurance number, passport or other identification number, salary, nationality, any shares of Stock, details of all stock options granted under the Plan or any other entitlement to shares awarded, canceled, exercised, vested, unvested or outstanding in the Participant's favor ("Data"), for purposes of implementing, administering and managing the Plan. The legal basis, where required, for the collection and processing of Data is the Participant's consent.

(c) Stock Plan Administration Service Providers. The Company may transfer Data, or parts thereof, to a third-party stock plan administrator/broker ("Service Provider") which may assist the Company, presently or in the future, with the implementation, administration and management of the Plan. The Participant acknowledges and understands that the Service Provider will open an account for the Participant to receive and trade shares of Stock acquired under the Plan and the Participant may be asked to agree on separate terms and data processing practices with the Service Provider, with such agreement being a condition to the Participant's ability to participate in the Plan. Where required, the legal basis for the transfer of Data to the Service Provider is the Participant's consent.

(d) International Data Transfers. The Company is, and the Service Provider may be, based in the United States. The Participant's country or jurisdiction may have different data privacy laws and protections than the United States. For example, the European Commission has issued only a limited adequacy finding with respect to the United States that applies only if and to the extent companies self-certify and remain self-certified under the EU-U.S. Privacy Shield program, which is open to companies subject to the jurisdiction of the Federal Trade Commission. The Company has currently not registered for the EU-U.S. Privacy Shield program. The Company's legal basis for the transfer of data, where required, is the Participant's consent.

(e) Data Retention. The Company will hold and use Data only as long as is necessary to implement, administer and manage the Participant's participation in the Plan, or as required to comply with legal or regulatory obligations including under tax, exchange control, labor and securities laws. This may mean Data is retained until after the Participant's employment or service relationship ends. When the Company or the Employer no longer need Data for any of the above purposes, they will cease processing it in this context and remove it from all of their systems used for such purposes, to the fullest extent possible.

(f) Voluntariness and Consequences of Consent Denial or Withdrawal. Participation in the Plan is voluntary and the Participant is providing the consents herein on a purely voluntary basis. The Participant understands that he or she may request to stop the transfer and processing of the Data for purposes of his or her participation in the Plan and that the Participant's compensation from or service relationship with the Employer will not be affected. The only consequence of refusing or withdrawing consent is that the Company would not be able to allow the Participant to participate in the Plan. The Participant understands that his or her Data will still be processed in relation to the Participant's employment or service relationship for record-keeping purposes.

(g) Data Subject Rights. The Participant may have a number of rights under the data privacy laws in his or her jurisdiction. Depending on where the Participant is based, such rights may include the right to (i) request access to or copies of Data the Company processes, (ii) rectify incorrect Data, (iii) delete Data, (iv) restrict the processing of Data, (v) restrict the portability of Data, (vi) lodge complaints with the competent authorities in the Participant's jurisdiction, and/or (vii) receive a list with the names and addresses of any potential recipients of Data. To receive clarification regarding these rights or to exercise these rights, the Participant can contact his or her human resources representative.

By signing below, the Participant declares that he or she agrees with the data processing practices as described above. The Participant understands and acknowledges that the Participant may withdraw his or her consent at any time with future effect for any or no reason as described in sub-section (f) above.

Submitted by:

PARTICIPANT

Signature

Print Name

EXHIBIT B
FOR USE WITH FIVE YEAR AWARDS
VESTING

Annual Operational Performance per Diluted Share¹

Fiscal Year (A)	Minimum Vesting (10% Growth)		Maximum Vesting (17.5% Growth)	
	% of Shares Vesting (B)	YE Operating Performance (per Diluted Share) (C)	% of Shares Vesting (D)	YE Operating Performance (per Diluted Share) (E)
2022	5 %	\$ 195.37	20 %	\$ 208.69
2023	5 %	\$ 214.91	20 %	\$ 245.21
2024	5 %	\$ 236.4	20 %	\$ 288.12
2025	5 %	\$ 260.04	20 %	\$ 338.55
2026	5 %	\$ 286.04	20 %	\$ 397.79

1. Annual Operational Performance Vesting. Effective as of the last day of each of the Company’s fiscal years 2022-2026 there shall become vested the percentage of shares covered by the Option which is equal to the Annual Amount (as described below). The Options shall become vested and exercisable as of the date that the Administrator verifies the AOP (as defined below); provided, however, the vesting hereunder will be effective as to Participant as of the end of the fiscal year to which such Annual Amount relates (notwithstanding any termination of Participant’s employment during the period between the end of such fiscal year and the verification of the AOP and, in such case, notwithstanding the provisions of Section 3.1(b)). For each such fiscal year, the Administrator shall verify the AOP, and shall notify the Company’s Chief Executive Officer of its determination with respect thereto, within ten business days after the Administrator receives the Company’s audited financial statements for that fiscal year.

X. For each year (the “performance year”), the Annual Amount is zero if the Annual Operational Performance per Diluted Share (“AOP”)² with respect to such year is less than the amount indicated for such year in column (C). Otherwise the Annual Amount shall be equal to the amount indicated for such year in column (B) plus the product of (a) the excess of (1) the amount indicated for such year in column (D) over (2) the amount indicated for such year in column (B) and (b) the ratio of (1) the excess of (x) the AOP with respect to the year (but not more than the amount indicated in Column (E) for such year) over (y) the amount indicated for such year in column (C) to (2) the excess of (x) the amount indicated for such year in column (E) over (y) the amount indicated for such year in column (C).

Y. In calculating the AOP in Section X above for any performance year there shall also be taken into account any AOP in any of the two prior performance years (starting in fiscal year 2022) which was in excess of the amount indicated in Column (E) for such prior year and has not previously been taken into account hereunder but only if doing so would increase the Annual Amount in such performance year; provided, however that the excess applied under this Section Y and Section Z below shall be limited in any given year to \$100. If the Participant is subsequently awarded options vesting in 2027 and 2028, any AOP during 2025 and 2026 in excess of the amount indicated in Column (E) (and not previously taken into account hereunder) may be used in one or more of the next two following years by treating such excess as AOP in the performance year under the option agreement granting said options; provided, however that the excess applied in this sentence shall be limited in any given year to \$100.

² As of a given date, the Company’s “Annual Operational Performance per Diluted Share” shall mean the ratio of (1) the excess of (a) the product of (i) EBITDA and (ii) the Fixed Market Multiple (as defined below) over (b) Net Debt to (2) the Company’s number of Diluted Shares as of such date, where “EBITDA,” “Net Debt” and “Diluted Shares” have the meanings set forth in the Stock Option Agreement set forth on Exhibit A. For purposes of this Exhibit B, the Fixed Market Multiple shall mean 11.58, as adjusted for the weighted EBITDA multiple of future acquisitions as determined by the Committee.

Z. If the Annual Amount in any performance year is less than the amount indicated in column (D) for such year then an amount equal to the excess of (1) the amount indicated in column (D) for such year over (2) the actual Annual Amount for such year may vest in one or more of the next two following years by treating as AOP in the performance year under Section X above any excess of AOP in one of such following years over the amount indicated in column (E) for the applicable following year; provided, however that the excess applied under this Section Z and Section Y above shall be limited in any given year to \$100. The portion of any excess AOP amount which is so used may not be used more than once.

2. Adjustments of Operational Performance Objectives. The Operational Performance targets specified in this Exhibit B are based upon certain revenue and expense assumptions about the future business of the Company as of the date the Option is granted. Accordingly, in the event that, after such date, the Administrator determines, in its sole discretion, that any acquisition or disposition of any business by the Company or any dividend or other distribution (whether in the form of cash, Stock, other securities or other property), recapitalization, reclassification, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Stock or other securities of the Company, issuance of warrants or other rights to purchase Stock or other securities of the Company, any unusual or nonrecurring transactions or events affecting the Company, or the financial statements of the Company, or change in applicable laws, regulations, or accounting principles occurs such that an adjustment is determined by the Administrator to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to the Option, then the Administrator may, in good faith and in such manner as it may deem equitable, adjust the amounts set forth on this Exhibit B (and/or adjust the definitions of EBITDA and Net Debt) to reflect the projected effect of such transaction(s) or event(s) on Operational Performance. Further, in the event that the Company pays a special dividend, the AOP targets shall be adjusted as determined by the Administrator in accordance with past practice.

EXHIBIT B

FOR USE WITH TWO YEAR EXTENSION GRANTS

VESTING

Annual Operational Performance per Diluted Share¹

Fiscal Year (A)	Minimum Vesting (10% Growth)		Maximum Vesting (17.5% Growth)	
	% of Shares Vesting (B)	YE Operating Performance (per Diluted Share) (C)	% of Shares Vesting (D)	YE Operating Performance (per Diluted Share) (E)
2025	12.5 %	\$ 260.04	50 %	\$ 338.55
2026	12.5 %	\$ 286.04	50 %	\$ 397.79

1. Annual Operational Performance Vesting. Effective as of the last day of each of the Company’s fiscal years 2025-2026 there shall become vested the percentage of shares covered by the Option which is equal to the Annual Amount (as described below). The Options shall become vested and exercisable as of the date that the Administrator verifies the AOP (as defined below); provided, however, the vesting hereunder will be effective as to Participant as of the end of the fiscal year to which such Annual Amount relates (notwithstanding any termination of Participant’s employment during the period between the end of such fiscal year and the verification of the AOP and, in such case, notwithstanding the provisions of Section 3.1(b)). For each such fiscal year, the Administrator shall verify the AOP, and shall notify the Company’s Chief Executive Officer of its determination with respect thereto, within ten business days after the Administrator receives the Company’s audited financial statements for that fiscal year.

X. For each year (the “performance year”), the Annual Amount is zero if the Annual Operational Performance per Diluted Share³ (“AOP”) with respect to such year is less than the amount indicated for such year in column (C). Otherwise, the Annual Amount shall be equal to the amount indicated for such year in column (B) plus the product of (a) the excess of (1) the amount indicated for such year in column (D) over (2) the amount indicated for such year in column (B) and (b) the ratio of (1) the excess of (x) the AOP with respect to the year (but not more than the amount indicated in Column (E) for such year) over (y) the amount indicated for such year in column (C) to (2) the excess of (x) the amount indicated for such year in column (E) over (y) the amount indicated for such year in column (C).

Y. In calculating the AOP in Section X above for any performance year there shall also be taken into account any AOP in any of the two prior performance years (starting in fiscal year 2022) which was in excess of the amount indicated in Column (E) for such prior year and has not previously been taken into account hereunder but only if doing so would increase the Annual Amount in such performance year; provided, however that the excess applied under this Section Y and Section Z below shall be limited in any given year to \$100. If the Participant is subsequently awarded options vesting in 2027 and 2028, any AOP during 2025 and 2026 in excess of the amount indicated in Column (E) (and not previously taken into account hereunder) may be used in one or more of the next two following years by treating such excess as AOP in the performance year under the option agreement granting said options; provided, however that the excess applied in this sentence shall be limited in any given year to \$100.

Z. If the Annual Amount in 2025 is less than the amount indicated in column (D) for 2025 then an amount equal to the excess of (1) the amount indicated in column (D) for 2025 over (2) the actual Annual Amount for 2025 may vest in 2026 by treating as AOP in 2025 any excess of AOP in 2026 over the amount indicated in column (E) for 2025. The portion of any excess AOP amount which is so used may not be used more than once; provided, however that the excess applied under this Section Z and Section Y above shall be limited in any given year to \$100.

³ As of a given date, the Company’s “Annual Operational Performance per Diluted Share” shall mean the ratio of (1) the excess of (a) the product of (i) EBITDA and (ii) the Fixed Market Multiple (as defined below) over (b) Net Debt to (2) the Company’s number of Diluted Shares as of such date, where “EBITDA,” “Net Debt” and “Diluted Shares” have the meanings set forth in the Stock Option Agreement set forth on Exhibit A. For purposes of this Exhibit C, the Fixed Market Multiple shall mean 11.58, as adjusted for the weighted EBITDA multiple of future acquisitions as determined by the Committee.

2. Adjustments of Operational Performance Objectives. The Operational Performance targets specified in this Exhibit B are based upon certain revenue and expense assumptions about the future business of the Company as of the date the Option is granted. Accordingly, in the event that, after such date, the Administrator determines, in its sole discretion, that any acquisition or disposition of any business by the Company or any dividend or other distribution (whether in the form of cash, Stock, other securities or other property), recapitalization, reclassification, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Stock or other securities of the Company, issuance of warrants or other rights to purchase Stock or other securities of the Company, any unusual or nonrecurring transactions or events affecting the Company, or the financial statements of the Company, or change in applicable laws, regulations, or accounting principles occurs such that an adjustment is determined by the Administrator to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to the Option, then the Administrator may, in good faith and in such manner as it may deem equitable, adjust the amounts set forth on this Exhibit B (and/or adjust the definitions of EBITDA and Net Debt) to reflect the projected effect of such transaction(s) or event(s) on Operational Performance. Further, in the event that the Company pays a special dividend, the AOP targets shall be adjusted as determined by the Administrator in accordance with past practice.

EXHIBIT C

STOCK RETENTION GUIDELINES

As a condition to receiving the Option grant, Participant acknowledges and agrees to hold a number of shares and/or options with such value and for such period of time as set forth below:

(a) At all times during Participant's continued employment by the Company, Participant shall hold an aggregate amount of Company equity with a value equal to or greater than \$_____ (the "Retention Limit")**[FOR EXECUTIVE OFFICERS ADD:, one-half of which must be held in stock]**. This Retention Limit will supersede any Retention Limit in any prior dated option agreement between the Company and Participant pursuant to the Plan.

For purposes of this Exhibit C, Company equity shall be equal to (i) the Fair Market Value of any Common Stock held by the Participant plus (ii) the value of vested options then held by Participant, whether granted pursuant to the Plan, the Company's 2006 Stock Incentive Plan, the Company's 2003 Stock Option Plan or otherwise, which will be equal to the Fair Market Value of the Common Stock underlying the options over the exercise price.

(b) If at any time after the date hereof the aggregate amount of Company equity held by Participant falls below the Retention Limit because of a decline in the Fair Market Value of the Common Stock, Participant will have three years to reach the Retention Limit before the Administrator may exercise any remedies under paragraph (d).

(c) Participant shall not be obligated to comply with the Retention Limit until five years from the date of grant; provided, however, that notwithstanding the foregoing, Participant may not make any sales of vested Options until the Retention Limit is reached, and thereafter, only to the extent that Participant would, at the time of the sale, be in compliance with the Retention Limit, except that Participants may make sales under 10b5-1 plans in existence on the date hereof so long as such sales would be in compliance with any preexisting Retention Limit.

(d) Participant's failure to hold that number of shares and/or vested options set forth in this Exhibit C shall result in Participant's forfeiture of all unvested Options unless otherwise determined by the Administrator, in its sole discretion.

**AMENDMENT TO FOURTH AMENDED AND RESTATED
TRANSDIGM GROUP INCORPORATED
2006 STOCK INCENTIVE PLAN DIVIDEND EQUIVALENT PLAN**

WHEREAS, TransDigm Group Incorporated (the “Company”) currently maintains and sponsors the Fourth Amended and Restated TransDigm Group Incorporated 2006 Stock Incentive Plan Dividend Equivalent Plan (the “Plan”); and

WHEREAS, the Compensation Committee of the Board of Directors of the Company wishes to amend the Plan in accordance with the provisions of Section 5(a) of the Plan..

NOW, THEREFORE, the Plan is hereby amended as follows:

Section 4(a)(ii) of the plan is amended to change the words “record date” in two places in the first sentence to “ex-dividend date”.

This Amendment shall be effective as of October 26, 2022.

Except as modified by this Amendment, all of the terms and conditions of the Plan shall remain valid and in full force and effect.

IN WITNESS WHEREOF, this Amendment was duly adopted by the Compensation Committee on October 26, 2022.

TRANSDIGM GROUP
INCORPORATED

By /s/ Halle Martin
Halle Martin, General
Counsel, Chief
Compliance Officer
and Secretary

**AMENDMENT TO
AMENDED AND RESTATED TRANSDIGM GROUP INCORPORATED
2014 STOCK OPTION PLAN DIVIDEND EQUIVALENT PLAN**

WHEREAS, TransDigm Group Incorporated (the “Company”) currently maintains and sponsors the Amended and Restated TransDigm Group Incorporated 2014 Stock Option Plan Dividend Equivalent Plan (the “Plan”); and

WHEREAS, the Compensation Committee of the Board of Directors of the Company wishes to amend the Plan in accordance with the provisions of Section 5(a) of the Plan..

NOW, THEREFORE, the Plan is hereby amended as follows:

Section 4(a)(ii) of the plan is amended to change the words “record date” in two places in the first sentence to “ex-dividend date”.

This Amendment shall be effective as of October 26, 2022.

Except as modified by this Amendment, all of the terms and conditions of the Plan shall remain valid and in full force and effect.

IN WITNESS WHEREOF, this Amendment was duly adopted by the Compensation Committee on October 26, 2022.

TRANSDIGM GROUP
INCORPORATED

By /s/ Halle Martin
Halle Martin, General
Counsel, Chief
Compliance Officer
and Secretary

**FOURTEENTH AMENDMENT TO THE
RECEIVABLES PURCHASE AGREEMENT**

This FOURTEENTH AMENDMENT TO THE RECEIVABLES PURCHASE AGREEMENT (this "Amendment"), dated as of July 25, 2022, is entered into by and among the following parties:

- (i) TRANSDIGM RECEIVABLES LLC, a Delaware limited liability company, as Seller;
- (ii) TRANSDIGM, INC., a Delaware corporation, as Servicer;
- (iii) PNC BANK, NATIONAL ASSOCIATION, as a Committed Purchaser, as Purchaser Agent for its Purchaser Group and as Administrator ("PNC"); and
- (iv) FIFTH THIRD BANK, NATIONAL ASSOCIATION ("Fifth Third"), as a Committed Purchaser and as Purchaser Agent for its Purchaser Group.

Capitalized terms used but not otherwise defined herein (including such terms used above) have the respective meanings assigned thereto in the Receivables Purchase Agreement described below.

BACKGROUND

A. The parties hereto and PNC Capital Markets LLC, as structuring agent, have entered into a Receivables Purchase Agreement, dated as of October 21, 2013 (as amended, restated, supplemented or otherwise modified through the date hereof, the "Receivables Purchase Agreement").

B. Concurrently herewith, the parties hereto are entering into that certain Amended and Restated Fee Letter in connection herewith (the "Amended Fee Letter").

C. The parties hereto desire to amend the Receivables Purchase Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

SECTION 1. Amendments to the Receivables Purchase Agreement. The Receivables Purchase Agreement is hereby amended to incorporate the changes shown on the marked pages of the Receivables Purchase Agreement attached hereto as Exhibit A.

SECTION 2. Representations and Warranties of the Seller and Servicer. Each of the Seller and the Servicer hereby represents and warrants, as to itself, to the Administrator, each Purchaser and each Purchaser Agent, as follows:

(a) *Representations and Warranties*. Immediately after giving effect to this Amendment, the representations and warranties made by such Person in the Transaction Documents to which it is a party are true and correct as of the date hereof (unless stated to relate solely to an earlier date, in which case such representations or warranties were true and correct as of such earlier date).

(b) *Enforceability.* This Amendment and each other Transaction Document to which it is a party, as amended hereby, constitute the legal, valid and binding obligation of such Person enforceable against such Person in accordance with its respective terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights generally and by general principles of equity, regardless of whether enforceability is considered in a proceeding in equity or at law.

(c) *No Termination Event.* No event has occurred and is continuing, or would result from the transactions contemplated hereby, that constitutes a Purchase and Sale Termination Event, an Unmatured Purchase and Sale Termination Event, a Termination Event or an Unmatured Termination Event.

SECTION 3. Effect of Amendment. All provisions of the Receivables Purchase Agreement and the other Transaction Documents, as expressly amended and modified by this Amendment, shall remain in full force and effect. After this Amendment becomes effective, all references in the Receivables Purchase Agreement (or in any other Transaction Document) to "this Receivables Purchase Agreement", "this Agreement", "hereof", "herein" or words of similar effect referring to the Receivables Purchase Agreement shall be deemed to be references to the Receivables Purchase Agreement as amended by this Amendment. This Amendment shall not be deemed, either expressly or impliedly, to waive, amend or supplement any provision of the Receivables Purchase Agreement other than as set forth herein.

SECTION 4. Effectiveness. This Amendment shall become effective as of the date hereof upon the satisfaction of the following conditions precedent:

(a) The Administrator shall have received counterparts of this Amendment, duly executed by each of the parties hereto.

(b) The Administrator shall have received counterparts of the Amended Fee Letter duly executed by each of the parties thereto.

(c) The Administrator shall have received confirmation that the "Closing Fees" set forth in the Amended Fee Letter have been paid in accordance with the terms thereof.

(d) The Administrator shall have received such other agreements, documents, certificates, instruments and opinions listed on the closing memorandum attached as Exhibit B hereto.

SECTION 5. Counterparts. This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute but one and the same instrument. Delivery of an executed counterpart of a signature page to this Amendment by facsimile or e-mail transmission shall be effective as delivery of a manually executed counterpart hereof.

SECTION 6. GOVERNING LAW. THIS AMENDMENT SHALL BE DEEMED TO BE A CONTRACT MADE UNDER AND GOVERNED BY THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING FOR SUCH PURPOSE SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK).

SECTION 7. Section Headings. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Receivables Purchase Agreement or any provision hereof or thereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment by their duly authorized officers as of the date first above written.

TRANSDIGM RECEIVABLES LLC,
as Seller

By: /s/ Halle F. Martin
Name: Halle F. Martin
Title: Secretary

TRANSDIGM, INC.,
as Initial Servicer

By: /s/ Halle F. Martin
Name: Halle F. Martin
Title: General Counsel, Chief Compliance Officer and Secretary

PNC BANK, NATIONAL ASSOCIATION,
as a Committed Purchaser, as a Purchaser Agent and as Administrator

By: /s/ Henry Chan
Name: Henry Chan
Title: Senior Vice President

FIFTH THIRD BANK, NATIONAL ASSOCIATION,
as a Committed Purchaser and as Purchaser Agent for its Purchaser Group

By: /s/ Matthew Glahn
Name: Matthew Glahn
Title: Officer

Exhibit A

[See Attached]

Exhibit A

Exhibit B

Closing Memorandum

[See Attached]

Exhibit B

SUBSIDIARIES OF TRANSDIGM GROUP INCORPORATED

TransDigm Inc. is a 100% owned subsidiary of TransDigm Group Incorporated. TransDigm Inc. owns directly or indirectly the following subsidiaries:

Name of Subsidiary	Jurisdiction of Incorporation or Organization
17111 Waterview Pkwy LLC	Delaware
4451734 Nova Scotia Company	Canada
Acme Aerospace, Inc.	Delaware
Adams Rite Aerospace GmbH	Germany
Adams Rite Aerospace, Inc.	California
Advanced Inflatable Products Limited	United Kingdom
AeroControlex Group, Inc.	Delaware
Aerosonic LLC	Delaware
Airborne Acquisition, Inc.	Delaware
Airborne Global, Inc.	Delaware
Airborne Holdings, Inc.	Delaware
Airborne Systems Canada Ltd.	Canada
Airborne Systems Group Limited	United Kingdom
Airborne Systems Holdings Limited	United Kingdom
Airborne Systems Limited	United Kingdom
Airborne Systems NA, Inc.	Delaware
Airborne Systems North America Inc.	Delaware
Airborne Systems North America of CA Inc.	Delaware
Airborne Systems North America of NJ Inc.	New Jersey
Airborne Systems Pension Trust Limited	United Kingdom
Airborne UK Acquisition Limited	United Kingdom
Airborne UK Parent Limited	United Kingdom
Aircraft Materials Limited	United Kingdom
Air-Sea Survival Equipment Trustee Limited	United Kingdom
AmSafe Aviation (Chongqing), Ltd.	China
AmSafe Bridport (Kunshan) Co., Ltd.	China
AmSafe Bridport (Private) Ltd.	Sri Lanka
AmSafe Bridport Ltd.	United Kingdom
AmSafe Global Holdings, Inc.	Delaware
AmSafe Global Services (Private) Limited	Sri Lanka
AmSafe, Inc.	Delaware
Angus Electronics Co.	Delaware
Apical Industries, Inc.	Delaware
ARA Deutschland GmbH	Germany
ARA Holding GmbH	Germany
Arkwin Industries, Inc.	New York
Armtec Countermeasures Co.	Delaware
Armtec Countermeasures TNO Co.	Delaware
Armtec Defense Products Co.	Delaware

Name of Subsidiary	Jurisdiction of Incorporation or Organization
Auxitrol SAS	France
Auxitrol Weston Mexico, S. de R.L. de C.V.	Mexico
Auxitrol Weston Services China Ltd.	China
Auxitrol Weston Singapore Pte. Ltd.	Singapore
Auxitrol Weston USA, Inc.	Delaware
Aviation Technologies, Inc.	Delaware
Avionic Instruments LLC	Delaware
Avionics Specialties, Inc.	Virginia
AvtechTyee, Inc.	Washington
Beta Transformer Mexico, S. de R.L. de C.V.	Mexico
Power Device Corporation	New York
Beta Transformer Technology LLC	Delaware
Breeze-Eastern LLC	Delaware
Bridport Erie Aviation, Inc.	Delaware
Bridport Holdings, Inc.	Delaware
Bridport Ltd.	United Kingdom
Bridport-Air Carrier, Inc.	Washington
Bruce Aerospace, Inc.	Delaware
CDA InterCorp LLC	Florida
CEF Industries, LLC	Delaware
Century Helicopters, Inc.	Colorado
Champion Aerospace LLC	Delaware
Chelton Avionics Holdings, Inc.	Delaware
Chelton Avionics, Inc.	Delaware
Chelton CTS Limited	United Kingdom
Chelton Defence Communications Limited	United Kingdom
Chelton Defense Products, Inc.	Delaware
Chelton Limited	United Kingdom
CMC Electronics Aurora LLC	Delaware
CMC Electronics Inc.	Canada
CMC Electronics ME Inc.	Canada
Darchem Engineering Limited	United Kingdom
Darchem Holdings Limited	United Kingdom
Dart Aerospace B.V.	Netherlands
Dart Aerospace ULC	Canada
Dart Aerospace USA, Inc.	Washington
Dart Aerospace Company	Canada
Dart Buyer, Inc.	Delaware
Dart Helicopter Services, Inc.	Delaware
Dart Intermediate, Inc.	Delaware
Dart TopCo, Inc.	Delaware
Data Device Corporation	Delaware
DDC Electronics K.K.	Japan

Name of Subsidiary	Jurisdiction of Incorporation or Organization
DDC Electronics Ltd.	United Kingdom
DDC Electronics Private Limited	India
DDC Elektronik, GmbH	Germany
Dukes Aerospace, Inc.	Delaware
Edlaw Limited	United Kingdom
Electromech Technologies LLC	Delaware
Elektro-Metall Export GmbH	Germany
Elektro-Metall Paks KFT	Hungary
EST Defence Company UK Limited	United Kingdom
Esterline Acquisition Ltd	United Kingdom
Esterline do Brasil Assessoria e Intermediação Ltda	Brazil
Esterline Europe Company LLC	Delaware
Esterline Foreign Sales Corporation	US Virgin Islands
Esterline International Company	Delaware
Esterline Mexico, S. de R.L. de C.V.	Mexico
Esterline Technologies Corporation	Delaware
Esterline Technologies Europe Limited	United Kingdom
Esterline Technologies French Acquisition Limited	United Kingdom
Esterline Technologies Global Limited	United Kingdom
Esterline Technologies Holdings Limited	United Kingdom
Esterline Technologies SGIP, LLC	Delaware
Esterline Technologies Unlimited	United Kingdom
European Antennas Limited	United Kingdom
Extant Components Group Holdings, Inc.	Delaware
Extant Components Group Intermediate, Inc.	Delaware
GQ Parachutes Limited	United Kingdom
Guizhou Leach-Tianyi Aviation Electrical Company Ltd	China
HarcoSemco LLC	Connecticut
Hartwell Corporation	California
Heli Tech Inc.	Oregon
HYTEK Finishes Co.	Delaware
ILC Holdings, Inc.	Delaware
Irvin Aerospace Limited	United Kingdom
IrvinGQ France SAS	France
IrvinGQ Limited	United Kingdom
Janco Corporation	California
Johnson Liverpool LLC	Delaware
Kirkhill Inc.	Delaware
Korry Electronics Co.	Delaware
Kunshan Shield Restraint Systems, Ltd.	China
Leach Holding Corporation	Delaware
Leach International Asia-Pacific Ltd	Hong Kong
Leach International Corporation	Delaware

Name of Subsidiary	Jurisdiction of Incorporation or Organization
Leach International Europe S.A.S.	France
Leach International Germany GmbH	Germany
Leach International Mexico S. de R. L. de C. V.	Mexico
Leach International UK Ltd	United Kingdom
Leach Mexico Holding LLC	Delaware
Leach Technology Group, Inc.	Delaware
MarathonNorco Aerospace, Inc.	Delaware
Mason Electric Co.	Delaware
Mastsystem Int'l Oy	Finland
McKechnie Aerospace (Europe) Ltd.	United Kingdom
McKechnie Aerospace DE, Inc.	Delaware
McKechnie Aerospace DE, LP	United Kingdom
McKechnie Aerospace Holdings, Inc.	Delaware
McKechnie Aerospace US LLC	Delaware
Mecanismos de Matamoros S. de R.L. de C.V.	Mexico
NAT Seattle Inc.	Delaware
NMC Group, Inc.	California
Nordisk Asia Pacific Limited	Hong Kong
Nordisk Asia Pacific Pte Ltd	Singapore
Nordisk Aviation Products (Kunshan) Ltd.	China
Nordisk Aviation Products AS	Norway
Nordisk Aviation Products LLC	Delaware
North Hills Signal Processing Corp.	Delaware
North Hills Signal Processing Overseas LLC	Delaware
Norwich Aero Products Inc.	New York
Offshore Helicopter Support Services, Inc.	Louisiana
Palomar Products, Inc.	Delaware
Paravion Technologies Inc.	Colorado
Pexco Aerospace, Inc.	Delaware
PneuDrualics, Inc.	California
Pressure Systems International Ltd	United Kingdom
Schneller Asia Pte. Ltd.	Singapore
Schneller LLC	Delaware
Schneller S.A.R.L.	France
Semco Instruments, Inc.	Delaware
Shield Restraint Systems Ltd.	United Kingdom
Shield Restraint Systems, Inc.	Delaware
Signal Processing Matamoros S.A. de C.V.	Mexico
Simplex Manufacturing Co.	Oregon
Skandia, Inc.	Illinois
Skurka Aerospace, Inc.	Delaware
Symetrics Industries, LLC	Florida
Symetrics Technology Group, LLC	Florida

Name of Subsidiary	Jurisdiction of Incorporation or Organization
TA Aerospace Co.	California
TA Mfg Limited	United Kingdom
Tactair Fluid Controls, Inc.	New York
TDG Bavaria GmbH	Germany
TDG Dart Limited	United Kingdom
TDG ESL Holdings Inc.	Delaware
TDG France Ultimate Parent SAS	France
TDG Germany GmbH	Germany
TEAC Aerospace Holdings, Inc.	Delaware
TEAC Aerospace Technologies, Inc.	Delaware
Telair International GmbH	Germany
Telair International Services PTE Ltd	Singapore
Telair US LLC	Delaware
Texas Rotronics, Inc.	Texas
TransDigm (Barbados) SRL	Barbados
TransDigm Canada ULC	Canada
TransDigm European Holdings Limited	United Kingdom
TransDigm Ireland Ltd.	Ireland
TransDigm Receivables LLC	Delaware
TransDigm Technologies India Private Limited	India
TransDigm UK Holdings plc	United Kingdom
Transicoil (Malaysia) Sendirian Berhad	Malaysia
Transicoil LLC	Delaware
Wallop Defence UK Limited	United Kingdom
Weston Aerospace Ltd	United Kingdom
Whippany Actuation Systems, LLC	Delaware
XCEL Power Systems Ltd.	United Kingdom
Young & Franklin Inc.	New York

LISTING OF SUBSIDIARY GUARANTORS

TransDigm Group Incorporated has unconditionally guaranteed, on a joint and several basis, each of the following registered debt securities with each of the subsidiaries listed below under “Subsidiary Guarantors.”

Registered Debt Securities

8.00% senior secured notes due 2025 (“2025 Secured Notes”)
6.375% senior subordinated notes due 2026 (“6.375% 2026 Notes”)
6.875% senior subordinated notes due 2026 (“6.875% 2026 Notes”)
6.25% senior secured notes due 2026 (“2026 Secured Notes”)
7.50% senior subordinated notes due 2027 (“7.50% 2027 Notes”)
5.50% senior subordinated notes due 2027 (“5.50% 2027 Notes”)
4.625% senior subordinated notes due 2029 (“4.625% 2029 Notes”)
4.875% senior subordinated notes due 2029 (“4.875% 2029 Notes”)

Subsidiary Guarantors	Jurisdiction of Incorporation or Organization
17111 Waterview Pkwy LLC	Delaware
Acme Aerospace, Inc.	Delaware
Adams Rite Aerospace, Inc.	California
AeroControlex Group, Inc.	Delaware
Aerosonic LLC	Delaware
Airborne Acquisition, Inc.	Delaware
Airborne Global, Inc.	Delaware
Airborne Holdings, Inc.	Delaware
Airborne Systems NA, Inc.	Delaware
Airborne Systems North America Inc.	Delaware
Airborne Systems North America of CA Inc.	Delaware
Airborne Systems North America of NJ Inc.	New Jersey
AmSafe Global Holdings, Inc.	Delaware
AmSafe, Inc.	Delaware
Angus Electronics Co.	Delaware
Apical Industries, Inc.	Delaware
Arkwin Industries, Inc.	New York
Armtec Countermeasures Co.	Delaware
Armtec Countermeasures TNO Co.	Delaware
Armtec Defense Products Co.	Delaware
Auxitrol Weston USA, Inc.	Delaware
Aviation Technologies, Inc.	Delaware
Avionic Instruments LLC	Delaware
Avionics Specialties, Inc.	Virginia
AvtechTyee, Inc.	Washington
Beta Transformer Technology LLC	Delaware
Breeze-Eastern LLC	Delaware
Bridport Erie Aviation, Inc.	Delaware
Bridport Holdings, Inc.	Delaware

Subsidiary Guarantors	Jurisdiction of Incorporation or Organization
Bridport-Air Carrier, Inc.	Washington
Bruce Aerospace, Inc.	Delaware
CDA InterCorp LLC	Florida
CEF Industries, LLC	Delaware
Century Helicopters, Inc.	Colorado
Champion Aerospace LLC	Delaware
Chelton Avionics Holdings, Inc.	Delaware
Chelton Avionics, Inc.	Delaware
Chelton Defense Products, Inc.	Delaware
CMC Electronics Aurora LLC	Delaware
Dart Aerospace USA, Inc.	Washington
Dart Buyer, Inc.	Delaware
Dart Helicopter Services, Inc.	Delaware
Dart Intermediate, Inc.	Delaware
Dart TopCo, Inc.	Delaware
Data Device Corporation	Delaware
Dukes Aerospace, Inc.	Delaware
Electromech Technologies LLC	Delaware
Esterline Europe Company LLC	Delaware
Esterline International Company	Delaware
Esterline Technologies Corporation	Delaware
Esterline Technologies SGIP, LLC	Delaware
Extant Components Group Holdings, Inc.	Delaware
Extant Components Group Intermediate, Inc.	Delaware
HarcoSemco LLC	Connecticut
Hartwell Corporation	California
Heli Tech Inc.	Oregon
Hytek Finishes Co.	Delaware
ILC Holdings, Inc.	Delaware
Janco Corporation	California
Johnson Liverpool LLC	Delaware
Kirkhill Inc.	Delaware
Korry Electronics Co.	Delaware
Leach Holding Corporation	Delaware
Leach International Corporation	Delaware
Leach Mexico Holding LLC	Delaware
Leach Technology Group, Inc.	Delaware
MarathonNorco Aerospace, Inc.	Delaware
Mason Electric Co.	Delaware
McKechnie Aerospace DE, Inc.	Delaware
McKechnie Aerospace Holdings, Inc.	Delaware
McKechnie Aerospace US LLC	Delaware
NAT Seattle Inc.	Delaware

Subsidiary Guarantors	Jurisdiction of Incorporation or Organization
NMC Group, Inc.	California
Nordisk Aviation Products LLC	Delaware
North Hills Signal Processing Corp.	Delaware
North Hills Signal Processing Overseas LLC	Delaware
Norwich Aero Products Inc.	New York
Offshore Helicopter Support Services, Inc.	Louisiana
Palomar Products, Inc.	Delaware
Paravion Technologies Inc.	Colorado
Pexco Aerospace, Inc.	Delaware
PneuDraulics, Inc.	California
Power Device Corporation	New York
Schneller LLC	Delaware
Semco Instruments, Inc.	Delaware
Shield Restraint Systems, Inc.	Delaware
Simplex Manufacturing Co.	Oregon
Skandia, Inc.	Illinois
Skurka Aerospace, Inc.	Delaware
Symetrics Industries, LLC	Florida
Symetrics Technology Group, LLC	Florida
TA Aerospace Co.	California
Tactair Fluid Controls, Inc.	New York
TDG ESL Holdings Inc.	Delaware
TEAC Aerospace Holdings, Inc.	Delaware
TEAC Aerospace Technologies, Inc.	Delaware
Telair US LLC	Delaware
Texas Rotronics, Inc.	Texas
⁽¹⁾ TransDigm Inc.	Delaware
⁽¹⁾ TransDigm UK Holdings plc	United Kingdom
Transicoil LLC	Delaware
Whippany Actuation Systems, LLC	Delaware
Young & Franklin Inc.	New York

⁽¹⁾ Entity is also a subsidiary issuer.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statements (Form S-8 No. 333-174122 and Form S-8 No. 333-152847) pertaining to the TransDigm Group Incorporated 2006 Stock Incentive Plan,
- (2) Registration Statement (Form S-8 No. 333-132808) pertaining to the TransDigm Group Incorporated 2006 Stock Incentive Plan and the TransDigm Group Fourth Amended and Restated 2003 Stock Option Plan, as amended, and
- (3) Registration Statement (Form S-8 No. 333-200204) pertaining to the TransDigm Group 2014 Stock Option Plan;

of our reports dated November 10, 2022, with respect to the consolidated financial statements and schedule of TransDigm Group Incorporated and the effectiveness of internal control over financial reporting of TransDigm Group Incorporated included in this Annual Report (Form 10-K) of TransDigm Group Incorporated for the fiscal year ended September 30, 2022.

/s/ Ernst & Young LLP

Cleveland, Ohio
November 10, 2022

CERTIFICATION

I, Kevin Stein, certify that:

1. I have reviewed this annual report on Form 10-K of TransDigm Group Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors:
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 10, 2022

/s/ Kevin Stein

Name: Kevin Stein

Title: President, Chief Executive Officer and Director

(Principal Executive Officer)

CERTIFICATION

I, Michael Lisman, certify that:

1. I have reviewed this annual report on Form 10-K of TransDigm Group Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors:
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 10, 2022

/s/ Michael Lisman

Name: Michael Lisman

Title: Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of TransDigm Group Incorporated (the "Company") for the fiscal year ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kevin Stein, President, Chief Executive Officer and Director (Principal Executive Officer), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities and Exchange Act of 1934; and
2. The information contained in the Report fairly presents in all material respects, the financial condition of the Company as of the dates indicated and results of operations of the Company for the periods indicated.

Date: November 10, 2022

/s/ Kevin Stein

Name: Kevin Stein

Title: President, Chief Executive Officer and Director
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of TransDigm Group Incorporated (the "Company") for the fiscal year ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Lisman, Executive Vice President and Chief Financial Officer (Principal Financial Officer), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities and Exchange Act of 1934; and
2. The information contained in the Report fairly presents in all material respects, the financial condition of the Company as of the dates indicated and results of operations of the Company for the periods indicated.

Date: November 10, 2022

/s/ Michael Lisman

Name: Michael Lisman

Title: Executive Vice President and Chief Financial Officer
(Principal Financial Officer)